MEX-BT2500

SERVICE MANUAL

Ver. 1.0 2007.02

US Model
Canadian Model
AEP Model
UK Model
E Model

US and foreign patents licensed from Dolby Laboratories.

Model Name Using Similar Mechanism	CDX-GT315C
CD Mechanism Type	MG-101TA-188//Q
Optical Pick-up Name	DAX-25A

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SPECIFICATIONS

AUDIO POWER SPECIFICATIONS
(US model only)

POWER OUTPUT AND TOTAL HARMONIC DISTORTION
23 watts per channel minimum continuous average power into 4 ohms, 4 channels driven from 20 Hz to 20 kHz with no more than 5% total harmonic distortion.

CEA2006 Standard
Power Output: 17 Watts RMS × 4 at 4 Ohms < 1% THD+N
SN Ratio: 82 dBA
(reference: 1 Watt into 4 Ohms)

CD Player section
Signal-to-noise ratio: 95 dB
Frequency response: 10 – 20,000 Hz
Wow and flutter: Below measurable limit

Tuner section
US and Canadian models:

FM
Tuning range: 87.5 – 107.9 MHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Usable sensitivity: 9 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz: 0.5 % (stereo), 0.3 % (mono)
Separation: 35 dB at 1 kHz
Frequency response: 30 – 15,000 Hz

AM
Tuning range: 530 – 1,710 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Sensitivity: 30 µV

AEP and UK models:

FM
Tuning range: 87.5 – 108.0 MHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Usable sensitivity: 9 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz: 0.5 % (stereo), 0.3 % (mono)
Separation: 35 dB at 1 kHz
Frequency response: 30 – 15,000 Hz

MW/LW
Tuning range:
MW: 531 – 1,602 kHz
LW: 153 – 279 kHz
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Sensitivity: MW: 30 µV, LW: 40 µV

E model:

FM
Tuning range:
87.5 – 108.0 MHz (at 50 kHz step)
87.5 – 107.9 MHz (at 200 kHz step)
FM tuning interval: 50 kHz/200 kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector

– Continued on next page –

BLUETOOTH AUDIO SYSTEM

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eVehicle Division
Published by Sony Techno Create Corporation

SONY

Intermediate frequency: 10.7 MHz/450 kHz
Usable sensitivity: 9 dBf
Selectivity: 75 dB at 400 kHz
Signal-to-noise ratio: 67 dB (stereo), 69 dB (mono)
Harmonic distortion at 1 kHz: 0.5 % (stereo), 0.3 % (mono)
Separation: 35 dB at 1 kHz
Frequency response: 30 – 15,000 Hz

MW

Tuning range:
531 – 1,602 kHz (at 9 kHz step)
530 – 1,710 kHz (at 10 kHz step)
MW tuning interval: 9kHz/10kHz switchable
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Sensitivity: 30 µV

SW

Tuning range:
SW1: 2,940 – 7,735 kHz
SW2: 9,500 – 18,135 kHz
(except for 10,140 – 11,575 kHz)
Antenna (aerial) terminal:
External antenna (aerial) connector
Intermediate frequency: 10.7 MHz/450 kHz
Sensitivity: 30 µV

Wireless Communication

Communication System:
Bluetooth Standard version 2.0
Output:
Bluetooth Standard Power Class 2 (Max. +4 dBm)
Maximum communication range:
Line of sight approx. 10 m (32.8 ft)*1
Frequency band:
2.4 GHz band (2.4000 – 2.4835 GHz)
Modulation method: FHSS
Compatible Bluetooth Profiles*2:
A2DP (Advanced Audio Distribution Profile)
AVRCP (Audio Video Remote Control Profile)
HFP (Handsfree Profile) 1.0
HSP (Headset Profile)

*1 *The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, reception sensitivity, antenna's perfomance, operating system, software application, etc.*
*2 *Bluetooth standard profiles indicate the purpose of Bluetooth communication between devices.*

Power amplifier section

Outputs: Speaker outputs (sure seal connectors)
Speaker impedance: 4 – 8 ohms
Maximum power output: 52 W × 4 (at 4 ohms)

General

Output:
Power antenna (aerial) relay control terminal
Inputs:
Antenna (aerial) input terminal
AUM input jack (stereo mini jack)
Tone controls:
Low: ±10 dB at 100 Hz (XPLOD)
High: ±10 dB at 10 kHz (XPLOD)
Loudness:
+ 9 dB at 100 Hz
+ 5 dB at 10 kHz
Power requirements: 12 V DC car battery (negative ground (earth))
Dimensions: Approx. 178 × 50 × 179 mm ($7\ ^1/_8 \times 2 \times 7\ ^1/_8$ in) (w/h/d)

Mounting dimensions: Approx. 182 × 53 × 162 mm ($7\ ^1/_4 \times 2\ ^1/_8 \times 6\ ^1/_2$ in) (w/h/d)
Mass: Approx. 1.2 kg (2 lb 11 oz)
Supplied accessory:
Card remote commander: RM-X304
Parts for installation and connections (1 set)

MPEG Layer-3 audio coding technology and patents licensed from Fraunhofer IIS and Thomson.

Design and specifications are subject to change without notice.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

• US and Canadian models:

CAUTION
The use of optical instruments with this product will increase eye hazard.

• AEP, UK and E models:

CLASS 1
LASER PRODUCT

This label is located on the bottom of the chassis.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COM- POSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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SECTION 1
SERVICING NOTES

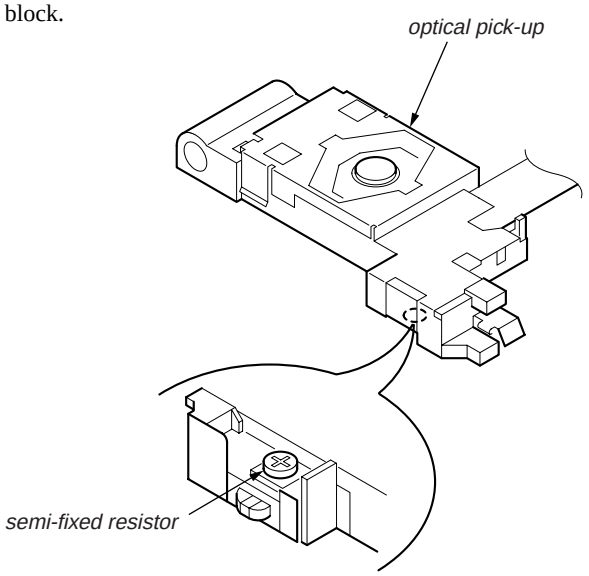
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

Never look into the laser diode emission from right above when checking it for adjustment. It is feared that you will lose your sight.

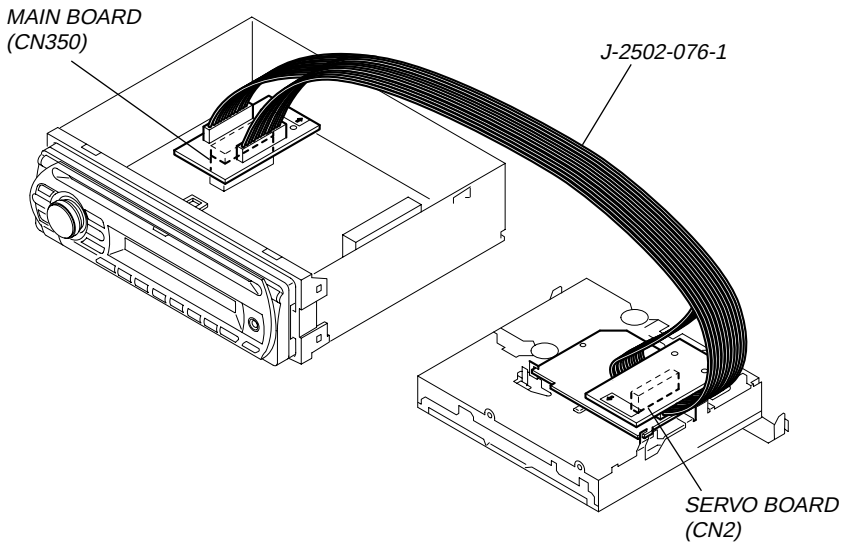
If the optical pick-up block is defective, please replace the whole optical pick-up block.
Never turn the semi-fixed resistor located at the side of optical pick-up block.



EXTENSION CABLE AND SERVICE POSITION

When repairing or servicing this set, connect the jig (extension cable) as shown below.

- Connect the MAIN board (CN350) and the SERVO board (CN2) with the extension cable (Part No. J-2502-076-1).



UNLEADED SOLDER

Boards requiring use of unleaded solder are printed with the lead-free mark (LF) indicating the solder contains no lead.
(Caution: Some printed circuit boards may not come printed with the lead free mark due to their particular size)

: LEAD FREE MARK

Unleaded solder has the following characteristics.

- Unleaded solder melts at a temperature about 40 ˚C higher than ordinary solder.
  Ordinary soldering irons can be used but the iron tip has to be applied to the solder joint for a slightly longer time.
  Soldering irons using a temperature regulator should be set to about 350 ˚C.
  Caution: The printed pattern (copper foil) may peel away if the heated tip is applied for too long, so be careful!
- Strong viscosity
  Unleaded solder is more viscou-s (sticky, less prone to flow) than ordinary solder so use caution not to let solder bridges occur such as on IC pins, etc.
- Usable with ordinary solder
  It is best to use only unleaded solder but unleaded solder may also be added to ordinary solder.

TEST DISCS

Use following TEST DISC when this set confirms the operation and checks it.

3-702-101-01 YEDS-18 (for CD)
4-225-203-01 PATD-012 (for CD)
J-2502-063-1 TCD-R082LMT (for CD-R)

NOTE FOR REPLACEMENT OF THE BT BOARD

When repairing, the complete BT board (A-1243-387-A) should be replaced since any parts in the BT board cannot be repaired.

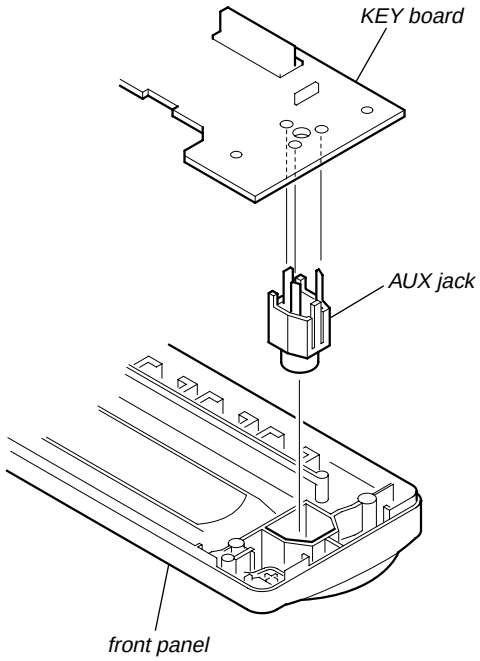
NOTE FOR REPLACEMENT OF THE SERVO BOARD

When repairing, the complete SERVO board (A-1177-201-A) should be replaced since any parts in the SERVO board cannot be repaired.

NOTE FOR REPLACEMENT OF THE AUX JACK (J901)

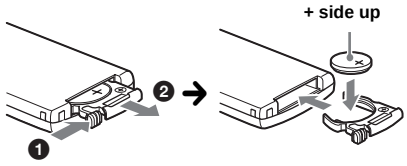
To replace the AUX jack requires alignment.

1. Insert the AUX jack into the front panel.
2. Place the KEY board on the front panel and align the terminals of the AUX jack with the holes in the KEY board.
3. Solder the three terminals of the jack.



Replacing the lithium battery of the card remote commander

Under normal conditions, the battery will last approximately 1 year. (The service life may be shorter, depending on the conditions of use.)
When the battery becomes weak, the range of the card remote commander becomes shorter.
Replace the battery with a new CR2025 lithium battery. Use of any other battery may present a risk of fire or explosion.



Notes on the lithium battery

- *Keep the lithium battery out of the reach of children. Should the battery be swallowed, immediately consult a doctor.*
- *Wipe the battery with a dry cloth to assure a good contact.*
- *Be sure to observe the correct polarity when installing the battery.*
- *Do not hold the battery with metallic tweezers, otherwise a short-circuit may occur.*

WARNING
Battery may explode if mistreated.
Do not recharge, disassemble, or dispose of in fire.

BLUETOOTH FUNCTION CHECKING METHOD USING A CELLULAR PHONE

1. Required Equipment

- Set to be tested (MEX-BT2500)
- Cellular phone (Recommended SEMC K320i or K800i, or select from connectable cellular phones list)
- Speaker connection (at least Front L/R ch)
- DC power supply (12V)

2. Preparation

Turn on the Bluetooth function of the cellular phone in advance.
Remove a Bluetooth device connected to the cellular phone in advance. (at least, remove XPLOD)

3. Test Environment

- No other Bluetooth device is making a communication in the periphery. (within 20m)
- No other MEX-BT2500 is supplied with electric power.
- There are no two or more wireless LAN access points in the periphery. (with 50m) (one is OK)
- The set should be tested in a place such as a meeting room, free from ambient noise.
- The speaker at the far end should be in a place such as another meeting room separated acoustically.

4. Setting

Install the MEX-BT2500 on the desktop.

5. Precautions

Beware of the following points when conducting the talking test:

- There is no fault if a talking can be made by adjusting appropriately the volume of the telephone of the other party and the cellular phone connected through the Bluetooth, besides the setup of MEX-BT2500.
- The speaker's voice will become loud naturally if the periphery is noisy, or become low if quiet. (even though the speaker intents to talk on the same volume level)
- The speaker's voice will become loud naturally if the other party's voice is loud.

6. BT PHONE Function Check

1. Press the [BLUETOOTH] button for 7 seconds to check if the BT logo changes from lighting to blinking.
2. Search peripheral equipment from the cellular phone to check if "XPLOD" is found.
3. Search peripheral equipment from the cellular phone apart from the set about 5m to check if "XPLOD" is found.
4. Check if peripheral equipment can be registered to the cellular phone (pass code 0000).
5. Make a connection to the cellular phone to check if the HF logo lights up. (This may be conducted at the same time in item 4)
6. After making a connection to the cellular phone, move the cellular phone apart from the set about 5m to check if the connection is held.
7. After switching the source of the MEX-BT2500 to other than BT PHONE (i.e. TUNER) to check that a sound is generated, make a call to the cellular phone connected to the set.
8. Check that the sound being played is interrupted and in turn the ring tone is heard. (the built-in sound of the set will be generated or the ring tone of cellular phone will be heard depending on the cellular phone)
9. Press the [PUSH SELECT] button for a short time to check that the conversation can be made.

10. Check that the other party's voice can be heard from the speaker.
11. Check by operating the Volume that the other party's volume varies.
12. Speak to the microphone of the set to check that the other party can hear it. (Make sure that there is no large difference from normal set)
13. Press the [PUSH SELECT] button for 2 seconds to check that the HF turns off and the set is switched to a telephone call between cellular phones. (This may not function depending on the cellular phone)
14. Press the [PUSH SELECT] button for 2 seconds to check that the HF turns on and the set is switched to a telephone call between MEX– BT2500 and far end.
15. Press the [PUSH SELECT] button for a short time to check that a telephone call is terminated. Also, the original source is returned.
16. Perform ACC OFF -> ON to check if the set is reconnected automatically to the cellular phone.

7. BT Audio Function Check

1. Connect the set to the BT audio device (or cellular phone furnished with BT audio function) to check that the streaming logo lights up.
2. Play the BT audio device to check that a sound is generated from the set when the source is switched to the BT audio.
3. Operate the set ([SEEK –/+], [6] button operation) to check if it can control the BT Audio.

Note: The functions that can be operated vary depending on the BT audio device connected.

4. Perform ACC OFF -> ON to check if the set can be reconnected to the BT audio device. (Some BT audio devices may be reconnected automatically)
5. With the BT audio source, press the [6] button to check if the streaming logo blinks and the set is reconnected to the BT audio device. (This function is disabled while the set is reconnected to a cellular phone. Accordingly, this test should be conducted after the power is turned on and then the HF logo lights up, or when about 30 seconds elapsed after the power on)

8. Initialize

This should be performed when the set is sent back to the user after all the checks finished successfully.

1. Execute the initialization.
2. Press the [BLUETOOTH] button for 3 seconds to check if the BT logo lights up.
3. Check that the set is not connected automatically to the cellular phone that was connected last.
4. With the BT audio source, check that the streaming logo does not blink when the [6] button is pressed.

9. What to Do after Checking

1. If the board does not need to be replaced
- Return the bluetooth settings to original ones. (settings when the set was received from the user)
2. If the board needs to be replaced
- Return to the factory shipping mode.

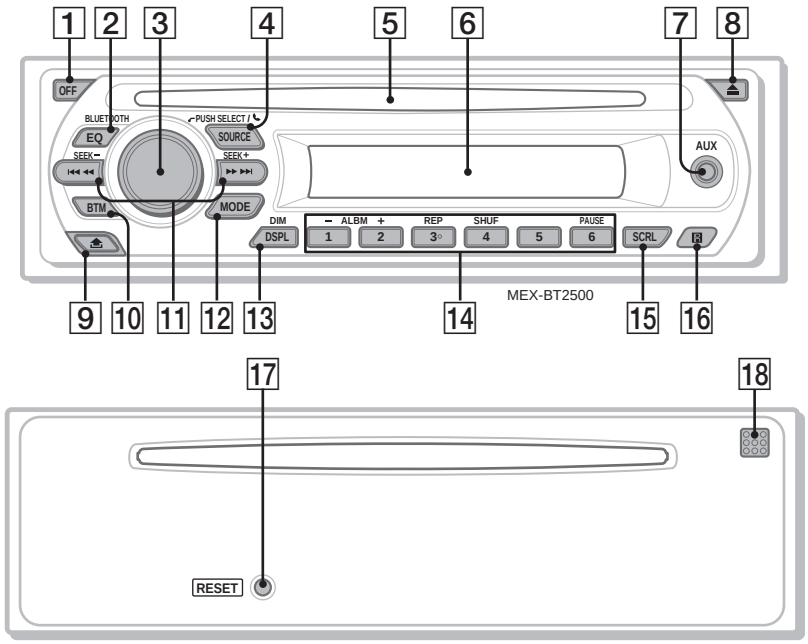
SECTION 2
GENERAL

This section is extracted from instruction manual.

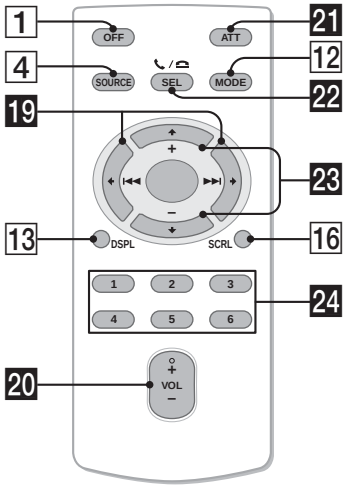
(US and Canadian models)

Location of controls and basic operations

Main unit



Card remote commander RM-X304



Refer to the pages listed for details. The corresponding buttons on the card remote commander control the same functions as those on the unit.

1 OFF button
To power off; stop the source.

2 EQ (equalizer)/BLUETOOTH button
CD/Radio/Bluetooth audio:
To select an equalizer type (XPLOD, NATURAL, HARD, UPBEAT, VOCAL, CUSTOM or OFF).
Power off:
For Bluetooth signal on/off, pairing.

3 Volume control dial/select/ (handsfree) button
To adjust volume (rotate); select setup items (press and rotate); receive/end a call (press).

4 SOURCE button
To power on; change the source (Radio/CD/AUX/Bluetooth audio/Bluetooth phone).

5 Disc slot
To insert the disc (label side up). Playback starts automatically.

6 Display window

7 AUX input jack
To connect a portable audio device.

8 ⏏ (eject) button
To eject the disc.

9 (front panel release) button

10 BTM button
To start the BTM function (press and hold).

11 SEEK –/+ buttons
CD:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
Radio:
To tune in stations automatically (press); find a station manually (press and hold).
Bluetooth audio device*1:
To skip tracks (press).

12 MODE button
To select the radio band (FM/AM).

13 DSPL (display)/DIM (dimmer) button
To change display items (press); change the display brightness (press and hold).

14 Number buttons
CD:
①/②: **ALBM –/+***2
To skip albums (press); skip albums continuously (press and hold).
③: **REP**
④: **SHUF**
⑥: **PAUSE***3
To pause playback. To cancel, press again.
Radio:
To receive stored stations (press); store stations (press and hold).
Bluetooth audio device*1:
⑥: **PAUSE**
To pause playback. To cancel, press again.

15 SCRL (scroll) button
To scroll the display item.

16 Receptor for the card remote commander

17 RESET button (located behind the front panel)

18 Microphone
Note
Do not cover the microphone, the handsfree function may not work properly.

The following buttons on the card remote commander have also different buttons/functions from the unit. Remove the insulation film before use.

19 ⬅ (I◀◀)/➡ (▶▶I) buttons
The same as (SEEK) –/+ on the unit.

20 VOL (volume) +/– button
To adjust volume.

21 ATT (attenuate) button
To attenuate the sound. To cancel, press again.

22 SEL (select)/ / (handsfree) button
The same as the select button on the unit.

23 ⬆ (+)/⬇ (–) buttons
To control CD, the same as ①/② (ALBM –/+) on the unit.

24 Number buttons
To receive stored stations (press); store stations (press and hold).

1 When a Bluetooth audio device (supports AVRCP of Bluetooth technology) is connected. Depending on the device, certain operations may not be available.
2 When an MP3/WMA is played.
3 When playing back on this unit.

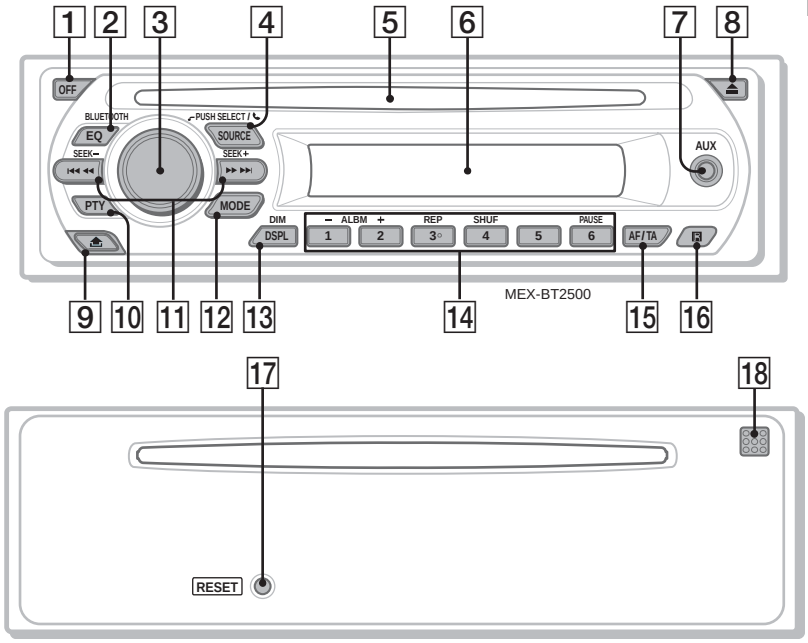
Note
If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

Tip
For details on how to replace the battery, see "Replacing the lithium battery of the card remote commander".

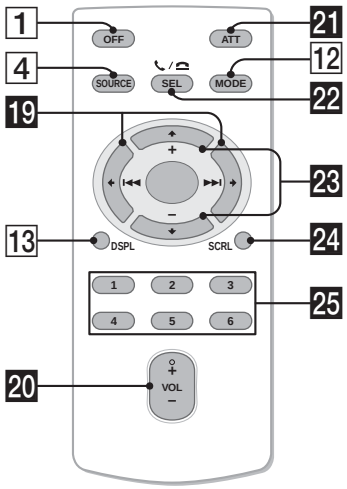
(AEP and UK models)

Location of controls and basic operations

Main unit



Card remote commander RM-X304



Refer to the pages listed for details. The corresponding buttons on the card remote commander control the same functions as those on the unit.

1 **OFF button**
To power off; stop the source.

2 **EQ (equalizer)/BLUETOOTH button**
CD/Radio/Bluetooth audio:
To select an equalizer type (XPLOD, NATURAL, HARD, UPBEAT, VOCAL, CUSTOM or OFF).
Power off:
For Bluetooth signal on/off, pairing.

3 **Volume control dial/select/ (handsfree) button**
To adjust volume (rotate); select setup items (press and rotate); receive/end a call (press).

4 **SOURCE button**
To power on; change the source (Radio/CD/AUX/Bluetooth audio/Bluetooth phone).

5 **Disc slot**
To insert the disc (label side up). Playback starts automatically.

6 **Display window**

7 **AUX input jack**
To connect a portable audio device.

8 **⏏ (eject) button**
To eject the disc.

9 **(front panel release) button**

10 **PTY (Program Type) button**
To select PTY in RDS.

11 **SEEK –/+ buttons**
CD:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
Radio:
To tune in stations automatically (press); find a station manually (press and hold).
Bluetooth audio device*1:
To skip tracks (press).

12 **MODE button**
To select the radio band (FM/MW/LW).

13 **DSPL (display)/DIM (dimmer) button**
To change display items (press); change the display brightness (press and hold).

14 **Number buttons**
CD:
①/②: **ALBM –/+***2
To skip albums (press); skip albums continuously (press and hold).
③: **REP**
④: **SHUF**
⑥: **PAUSE***3
To pause playback. To cancel, press again.
Radio:
To receive stored stations (press); store stations (press and hold).
Bluetooth audio device*1:
⑥: **PAUSE**
To pause playback. To cancel, press again.

15 **AF (Alternative Frequencies)/TA (Traffic Announcement) button**
To set AF and TA in RDS.

16 **Receptor for the card remote commander**

17 **RESET button** (located behind the front panel)

18 **Microphone**
Note
Do not cover the microphone, the handsfree function may not work properly.

The following buttons on the card remote commander have also different buttons/functions from the unit. Remove the insulation film before use.

19 **← (I◄◄)/→ (►►I) buttons**
The same as SEEK –/+ on the unit.

20 **VOL (volume) +/– button**
To adjust volume.

21 **ATT (attenuate) button**
To attenuate the sound. To cancel, press again.

22 **SEL (select)/ /⏏ (handsfree) button**
The same as the select button on the unit.

23 **↑ (+)/↓ (–) buttons**
To control CD, the same as ①/② (ALBM –/+) on the unit.

24 **SCRL (scroll) button**
To scroll the display item.

25 **Number buttons**
To receive stored stations (press); store stations (press and hold).

*1 *When a Bluetooth audio device (supports AVRCP of Bluetooth technology) is connected. Depending on the device, certain operations may not be available.*
*2 *When an MP3/WMA is played.*
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Note
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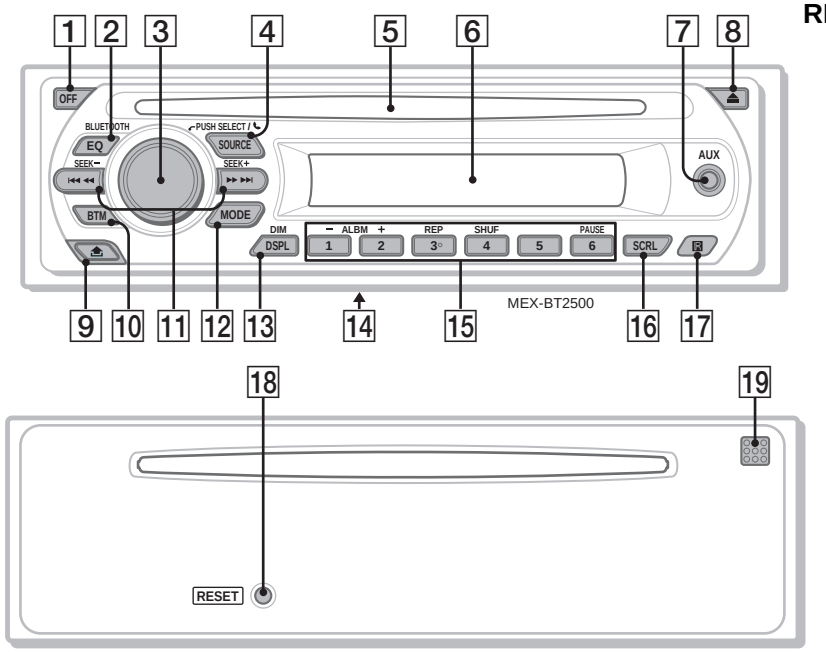
Tip
For details on how to replace the battery, see "Replacing the lithium battery of the card remote commander".

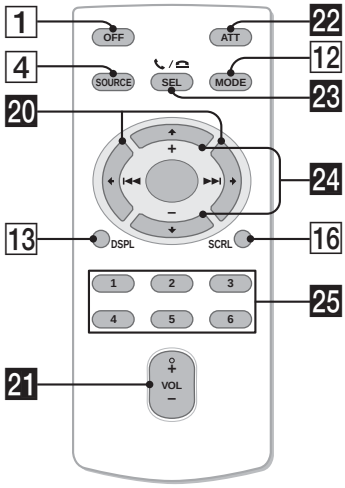
(E model)

Location of controls and basic operations

Main unit



Card remote commander RM-X304



Refer to the pages listed for details. The corresponding buttons on the card remote commander control the same functions as those on the unit.

1 OFF button
To power off; stop the source.

2 EQ (equalizer)/BLUETOOTH button
CD/Radio/Bluetooth audio:
To select an equalizer type (XPLOD, NATURAL, HARD, UPBEAT, VOCAL, CUSTOM or OFF).
Power off:
For Bluetooth signal on/off, pairing.

3 Volume control dial/select/ (handsfree) button
To adjust volume (rotate); select setup items (press and rotate); receive/end a call (press).

4 SOURCE button
To power on; change the source (Radio/CD/AUX/Bluetooth audio/Bluetooth phone).

5 Disc slot
To insert the disc (label side up). Playback starts automatically.

6 Display window

7 AUX input jack
To connect a portable audio device.

8 ⏏ (eject) button
To eject the disc.

9 (front panel release) button

10 BTM button
To start the BTM function (press and hold).

11 SEEK –/+ buttons
CD:
To skip tracks (press); skip tracks continuously (press, then press again within about 1 second and hold); reverse/fast-forward a track (press and hold).
Radio:
To tune in stations automatically (press); find a station manually (press and hold).
Bluetooth audio device*1:
To skip tracks (press).

12 MODE button
To select the radio band (FM/MW/SW).

13 DSPL (display)/DIM (dimmer) button
To change display items (press); change the display brightness (press and hold).

14 Frequency select switch (located on the bottom of the unit)
See "Frequency select switch" in the supplied installation/connections manual.

15 Number buttons
CD:
①/②: **ALBM –/+***2
To skip albums (press); skip albums continuously (press and hold).
③: **REP**
④: **SHUF**
⑥: **PAUSE***3
To pause playback. To cancel, press again.
Radio:
To receive stored stations (press); store stations (press and hold).
Bluetooth audio device*1:
⑥: **PAUSE**
To pause playback. To cancel, press again.

16 SCRL (scroll) button
To scroll the display item.

17 Receptor for the card remote commander

18 RESET button (located behind the front panel)

19 Microphone
Note
Do not cover the microphone, the handsfree function may not work properly.

The following buttons on the card remote commander have also different buttons/functions from the unit. Remove the insulation film before use.

20 ← (I◄◄)/→ (►►I) buttons
The same as (SEEK) –/+ on the unit.

21 VOL (volume) +/– button
To adjust volume.

22 ATT (attenuate) button
To attenuate the sound. To cancel, press again.

23 SEL (select)/ / (handsfree) button
The same as the select button on the unit.

24 ↑ (+)/↓ (–) buttons
To control CD, the same as ①/② (ALBM –/+) on the unit.

25 Number buttons
To receive stored stations (press); store stations (press and hold).

*1 When a Bluetooth audio device (supports AVRCP of Bluetooth technology) is connected. Depending on the device, certain operations may not be available.
*2 When an MP3/WMA is played.
*3 When playing back on this unit.

Note
If the unit is turned off and the display disappears, it cannot be operated with the card remote commander unless (SOURCE) on the unit is pressed, or a disc is inserted to activate the unit first.

Tip
For details on how to replace the battery, see "Replacing the lithium battery of the card remote commander".

MEX-BT2500

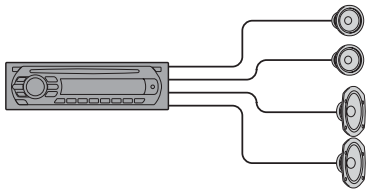
(US and Canadian models)

Equipment used in illustrations (not supplied)
Appareils utilisés dans les illustrations (non fourni)
Equipo utilizado en las ilustraciones (no suministrado)

Front speaker
Haut-parleur avant
Altavoz frontal

Rear speaker
Haut-parleur arrière
Altavoz posterior

Connection example
Exemple de raccordement
Ejemplo de conexiones



Cautions

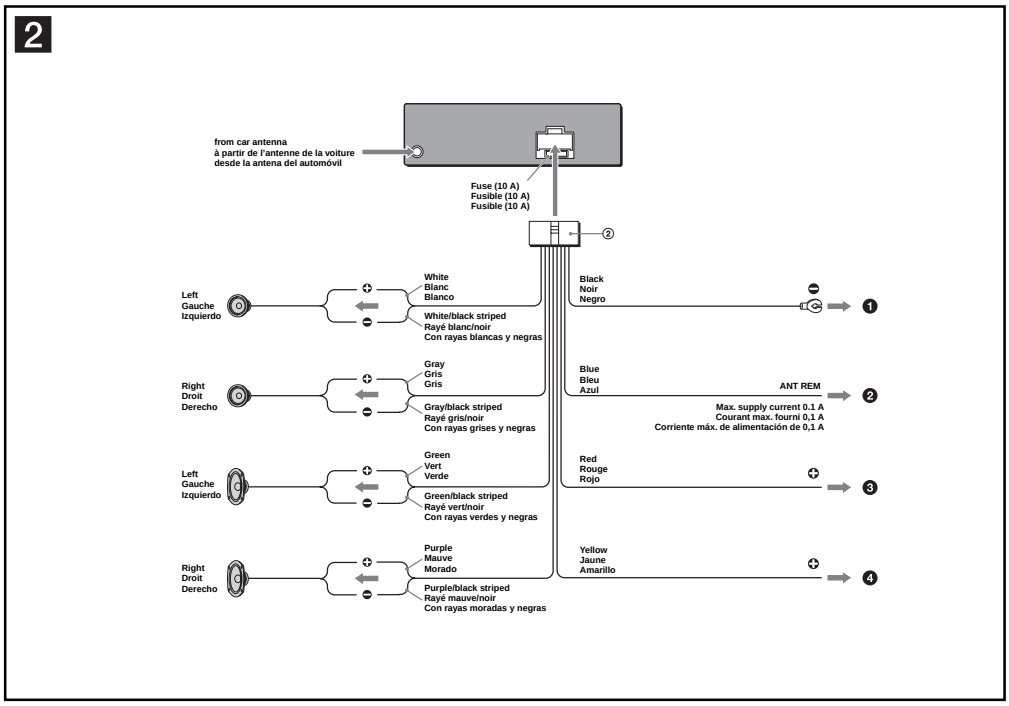
Be sure to install this unit in the dashboard of the car as the rear side of the unit becomes hot during use.

- This unit is designed for negative ground (earth) 12 V DC operation only.
- Do not get the leads under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power supply leads only after all other leads have been connected.
- **Run all ground (earth) leads to a common ground (earth) point.**
- Be sure to insulate any loose unconnected leads with electrical tape for safety.
- The use of optical instruments with this product will increase eye hazard.

Notes on the power supply lead (yellow)

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Connection diagram 2



❶ To a metal surface of the car
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ To the power antenna (aerial) control lead or power supply lead of antenna (aerial) booster

Notes
- *It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).*
- *When your car has a built-in FM/AM antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❸ To the +12 V power terminal which is energized in the accessory position of the ignition switch

Notes
- *If there is no accessory position, connect to the +12 V power (battery) terminal which is energized at all times. Be sure to connect the black ground (earth) lead to a metal surface of the car first.*
- *When your car has a built-in FM/AM antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❹ To the +12 V power terminal which is energized at all times
Be sure to connect the black ground (earth) lead to a metal surface of the car first.

Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner.*
- *When your car has built-in FM/AM antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker is not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker is connected correctly.

Précautions

Installez cet appareil sur le tableau de bord de la voiture, car l'arrière de l'appareil chauffe en cours d'utilisation.

- Cet appareil est exclusivement conçu pour fonctionner sur une tension de 12 V CC avec masse négative.
- Évitez de fixer des vis sur les câbles ou de coincer ceux-ci dans des pièces mobiles (par exemple, armature de siège).
- Avant d'effectuer les raccordements, éteignez le moteur pour éviter un court-circuit.
- Raccordez les câbles d'alimentation **jaune** et **rouge** seulement après avoir terminé tous les autres raccordements.
- **Rassemblez tous les câbles de mise à la masse en un point de masse commun.**
- Pour des raisons de sécurité, veillez à isoler avec du ruban isolant tout câble libre non raccordé.
- L'utilisation d'instruments optiques avec ce produit augmente les risques pour les yeux.

Remarques sur le câble d'alimentation (jaune)

- Lorsque cet appareil est raccordé à d'autres éléments stéréo, la valeur nominale raccordée du circuit utilisé de la voiture doit être supérieure à la somme des fusibles de chaque élément.
- Si aucun circuit de la voiture n'est assez puissant, raccordez directement l'appareil à la batterie.

Schéma de raccordement 2

❶ À un point métallique de la voiture
Branchez d'abord le câble de mise à la masse noir et, ensuite, les câbles d'alimentation jaune et rouge.

❷ Vers le câble de commande d'antenne électrique ou le câble d'alimentation de l'amplificateur d'antenne

Remarques
- *Il n'est pas nécessaire de raccorder ce câble s'il n'y a pas d'antenne électrique ni d'amplificateur d'antenne, ou avec une antenne télescopique manuelle.*
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les câbles de commande et d'alimentation ».*

❸ À la borne +12 V qui est alimentée quand la clé de contact est sur la position accessoires

Remarques
- *S'il n'y a pas de position accessoires, raccordez la borne d'alimentation (batterie) +12 V qui est alimentée en permanence.*
  Raccordez d'abord le câble de mise à la masse noir à un point métallique du véhicule.
- *Si votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, voir « Remarques sur les câbles de commande et d'alimentation ».*

❹ À la borne +12 V qui est alimentée en permanence
Raccordez d'abord le câble de mise à la masse noir à un point métallique du véhicule.

Remarques sur les câbles de commande et d'alimentation
- *Le câble de commande d'antenne électrique (bleu) fournit une alimentation de +12 V CC lorsque vous mettez la radio sous tension.*
- *Lorsque votre voiture est équipée d'une antenne FM/AM intégrée dans la vitre arrière/latérale, raccordez le câble de commande d'antenne électrique (bleu) ou le câble d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre détaillant.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire
Lorsque le câble d'alimentation jaune est raccordé, le circuit de la mémoire est alimenté en permanence même si la clé de contact est sur la position d'arrêt.

Remarques sur le raccordement des haut-parleurs
- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms avec une capacité électrique adéquate pour éviter de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne raccordez pas les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de mise à la masse de cet appareil à la borne négative (–) du haut-parleur.*
- *N'essayez pas de raccorder les haut-parleurs en parallèle.*
- *Raccordez uniquement des haut-parleurs passifs. Le raccordement de haut-parleurs actifs (avec amplificateurs intégrés) aux bornes des haut-parleurs peut endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les câbles des haut-parleurs intégrés installés dans votre voiture si l'appareil partage un câble négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement
Si les haut-parleurs ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs sont bien raccordés.

Precauciones

Asegúrese de instalar la unidad en el tablero del automóvil, ya que la parte posterior de la unidad se calienta durante el uso.

- Esta unidad ha sido diseñada para alimentarse sólo con cc de 12 V de masa negativa.
- No coloque los cables debajo de ningún tornillo, ni los aprisione con partes móviles (p. ej. los railes del asiento).
- Antes de realizar las conexiones, desactive el encendido del automóvil para evitar cortocircuitos.
- Conecte los cables de fuente de alimentación **amarillo** y **rojo** solamente después de haber conectado los demás.
- **Conecte todos los cables de conexión a masa a un punto común.**
- Por razones de seguridad, asegúrese de aislar con cinta aislante los cables sueltos que no estén conectados.

Notas sobre el cable de fuente de alimentación (amarillo)

- Cuando conecte esta unidad en combinación con otros componentes estéreo, la capacidad nominal del circuito conectado del automóvil debe ser superior a la suma del fusible de cada componente.
- Si no hay circuitos del automóvil con capacidad nominal suficientemente alta, conecte la unidad directamente a la batería.

Diagrama de conexión 2

❶ A una superficie metálica del automóvil
Conecte primero el cable de conexión a masa negro, y después los cables amarillo y rojo de fuente de alimentación.

❷ Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de señal de la antena

Notas
- *Si no se dispone de antena motorizada ni de amplificador de señal de la antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el automóvil incorpora una antena de FM/AM en el cristal posterior o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ Al terminal de alimentación de +12 V que recibe energía en la posición de accesorio del interruptor de la llave de encendido

Notas
- *Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de +12 V que recibe energía sin interrupción.*
  Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.
- *Si el automóvil incorpora una antena de FM/AM en el cristal posterior o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

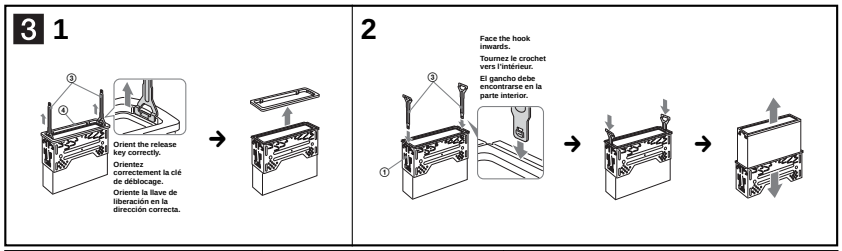
❹ Al terminal de alimentación de +12 V que recibe energía sin interrupción
Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.

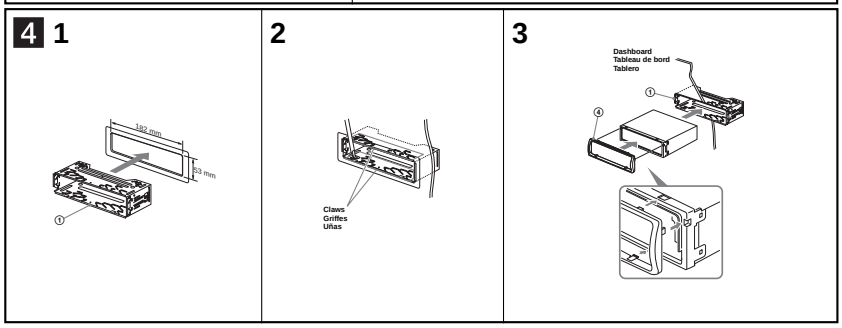
Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de + 12 V cuando conecte la alimentación del sintonizador.*
- *Si el automóvil dispone de una antena de FM/AM incorporada en el cristal posterior o lateral, conecte el cable de control de antena motorizada (azul) o el cable de fuente de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de señal de la antena existente. Para obtener más información, consulte a su distribuidor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

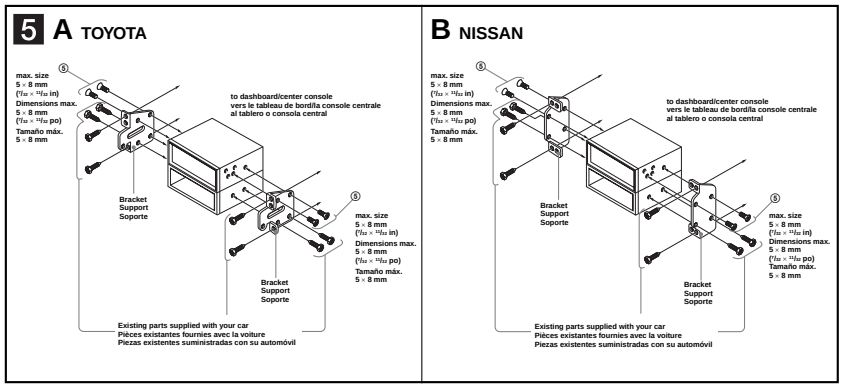
Conexión para protección de la memoria
Si conecta el cable de fuente de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, aunque apague el interruptor de encendido.

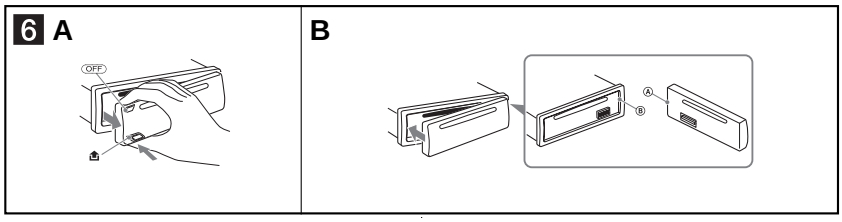
Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ω con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de conexión a masa de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallas de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si su unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz no está conectado correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión del altavoz.


3 1
Orient the release key correctly.
Orientez correctement la clé de déblocage.
Oriente la llave de liberación en la dirección correcta.
2
Face the hook inwards.
Tournez le crochet vers l'intérieur.
El gancho debe encontrarse en la parte interior.







Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 45°.

Removing the protection collar and the bracket 3

Before installing the unit, remove the protection collar ④ and the bracket ① from the unit.

1 Remove the protection collar ④.

❶ Engage the release keys ③ together with the protection collar ④.

❷ Pull out the release keys ③ to remove the protection collar ④.

2 Remove the bracket ①.

❶ Insert both release keys ③ together between the unit and the bracket ① until they click.

❷ Pull down the bracket ①, then pull up the unit to separate.

Mounting example 4

Installation in the dashboard

Notes

- *Bend these claws outward for a tight fit, if necessary (E-2).*
- *Make sure that the 4 catches on the protection collar ④ are properly engaged in the slots of the unit (E-3).*

Mounting the unit in a Japanese car 5

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

Note

To prevent malfunction, install only with the supplied screws ⑤.

How to detach and attach the front panel 6

Before installing the unit, detach the front panel.

6-A To detach

Before detaching the front panel, be sure to press (OFF). Press ⏏, and pull it off towards you.

6-B To attach

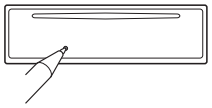
Engage part Ⓐ of the front panel with part Ⓑ of the unit, as illustrated, and push the left side into position until it clicks.

Warning if your car's ignition has no ACC position

Be sure to set the Auto Off function. For details, see the supplied Operating Instructions.
The unit will shut off completely and automatically in the set time after the unit is turned off, which prevents battery drain.
If you do not set the Auto Off function, press and hold (OFF) until the display disappears each time you turn the ignition off.

RESET button

When the installation and connections are completed, be sure to press the RESET button with a ball-point pen, etc., after detaching the front panel.



Précautions

- Choisissez soigneusement l'emplacement d'installation pour que l'appareil ne gêne pas le chauffeur pendant la conduite.
- Évitez d'installer l'appareil dans un endroit exposé à la poussière, à la saleté, à des vibrations excessives ou à des températures élevées comme en plein soleil ou à proximité de conduits de chauffage.
- Pour garantir un montage sûr, n'utilisez que le matériel fourni.

Réglage de l'angle de montage

Ajustez l'inclinaison à un angle inférieur à 45°.

Retrait du tour de protection et du support 3

Avant d'installer l'appareil, retirez le tour de protection ④ et le support ① de l'appareil.

1 Retirez le tour de protection ④.

❶ Insérez les clés de déblocage ③ en même temps dans le tour de protection ④.

❷ Tirez sur les clés de déblocage ③ pour retirer le tour de protection ④.

2 Retirez le support ①.

❶ Insérez les clés de déblocage ③ en même temps entre l'appareil et le support ① jusqu'au déclic.

❷ Tirez le support ① vers le bas, puis tirez sur l'appareil vers le haut pour les séparer.

Exemple de montage 4

Installation dans le tableau de bord

Remarques

- *Si nécessaire, pliez ces griffes vers l'extérieur pour assurer une prise correcte (F-2).*
- *Assurez-vous que les 4 loquets situés sur le tour de protection ④ sont correctement engagés dans les fentes de l'appareil (F-3).*

Montage de l'appareil dans une voiture japonaise 5

Cet appareil ne peut pas être installé dans certaines voitures japonaises. Consultez, dans ce cas, votre détaillant Sony.

Remarque

Pour éviter tout dysfonctionnement, utilisez uniquement les vis ⑤ fournies pour le montage.

Retrait et fixation de la façade 6

Avant d'installer l'appareil, retirez la façade.

6-A Pour la retirer

Avant de retirer la façade, n'oubliez pas d'appuyer d'abord sur (OFF). Appuyez ensuite sur ⏏, puis faites glisser la façade vers vous.

6-B Pour la fixer

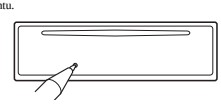
Engagez la partie Ⓐ de la façade dans la partie Ⓑ de l'appareil, comme illustré, puis appuyez sur le côté gauche jusqu'au déclic indiquant que la façade est en position.

Avertissement si le contact de votre véhicule ne comporte pas de position ACC

Veillez à régler la fonction de mise hors tension automatique. Pour obtenir davantage d'informations, reportez-vous au mode d'emploi fourni.
L'appareil s'éteint complètement et automatiquement après le laps de temps choisi une fois l'appareil mis hors tension afin d'éviter que la batterie ne se décharge.
Si vous ne réglez pas la fonction de mise hors tension automatique, appuyez sur la touche (OFF) et maintenez-la enfoncée jusqu'à ce que l'affichage disparaisse à chaque fois que vous coupez le contact.

Touche RESET

Une fois que l'installation et les raccordements sont terminés, retirez la façade et appuyez sur la touche RESET à l'aide d'un stylo à bille ou d'un autre objet pointu.



Precauciones

- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera con las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a polvo, suciedad, vibraciones excesivas o altas temperaturas como, por ejemplo, a la luz solar directa o cerca de conductos de calefacción.
- Para realizar una instalación segura y firme, utilice solamente los elementos de montaje suministrados.

Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 45°.

Extracción del marco de protección y del soporte 3

Antes de instalar la unidad, retire el marco de protección ④ y el soporte ① de ésta.

1 Retire el marco de protección ④.

❶ Una las llaves de liberación ③ al marco de protección ④.

❷ Retire las llaves de liberación ③ para extraer el marco de protección ④.

2 Retire el soporte ①.

❶ Inserte ambas llaves de liberación ③ entre la unidad y el soporte ① hasta que encajen.

❷ Presione el soporte ① y, a continuación, levante la unidad para separar ambos elementos.

Ejemplo de montaje 4

Instalación en el tablero

Notas

- *Si es necesario, doble estas uñas hacia fuera para que encaje firmemente (F-2).*
- *Compruebe que los 4 enganches del marco de protección ④ estén bien fijados en las ranuras de la unidad (F-3).*

Montaje de la unidad en un automóvil japonés 5

Es posible que no pueda instalar esta unidad en algunos automóviles japoneses. En tal caso, consulte a su distribuidor Sony.

Nota

Para evitar que se produzcan fallas de funcionamiento, realice la instalación solamente con los tornillos suministrados ⑤.

Forma de extraer e instalar el panel frontal 6

Antes de instalar la unidad, extraiga el panel frontal.

6-A Para extraerlo

Antes de extraer el panel frontal, asegúrese de presionar (OFF). Después presione ⏏ y tire de él hacia usted.

6-B Para instalarlo

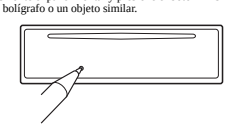
Coloque la parte Ⓐ del panel frontal en la parte Ⓑ de la unidad, como se muestra en la ilustración, y después presione la parte izquierda hasta que encaje.

Advertencia: si el encendido del automóvil no dispone de una posición ACC

Asegúrese de ajustar la función de desconexión automática. Para obtener más información, consulte el manual de instrucciones suministrado.
La unidad se apagará completa y automáticamente en el tiempo establecido después de que se desconecte la unidad, lo que evita que se desgaste la batería.
Si no ha ajustado la función de desconexión automática, mantenga presionado (OFF) cada vez que apague el interruptor de encendido, hasta que la pantalla desaparezca.

Botón RESET

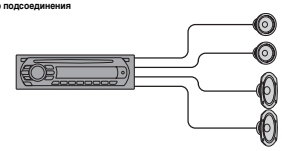
Una vez finalizada la instalación y las conexiones, desmonte el panel frontal y presione el botón RESET con un bolígrafo o un objeto similar.



(AEP and UK models)

Equipment used in illustrations (not supplied)
In Abbildungen dargestellte Geräte (nicht mitgeliefert)
Appareils utilisés dans les illustrations (non fournis)
Apparecchiatura utilizzata nelle illustrazioni (non in dotazione)
Apparatuur gebruikt in de afbeeldingen (niet bijgeleverd)
Аппаратура, фигурирующая в иллюстрациях (не прилагается)

Connection example
Anschlussbeispiel
Exemple de raccordement
Esempio di collegamento
Voorbeeldaansluitingen
Пример подсоединения



Cautions

Be sure to install this unit in the dashboard of the car as the rear side of the unit becomes hot during use.

- This unit is designed for negative ground (earth) 12 V DC operation only.
- Do not get the leads under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the power supply lead ③ to the unit and speakers before connecting it to the auxiliary power connector.
- **Run all ground (earth) leads to a common ground (earth) point.**
- Be sure to insulate any loose unconnected leads with electrical tape for safety.

Notes on the power supply lead (yellow)

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Connection diagram 2

Warning

If you have a power antenna (aerial) without a relay box, connecting this unit with the supplied power supply lead ③ may damage the antenna (aerial).

Notes on the control and power supply leads

- *The power antenna (aerial) control lead (blue) supplies +12 V DC when you turn on the tuner, or when you activate the AF (Alternative Frequency) or TA (Traffic Announcement) function.*
- *When your car has built-in FM/MW/LW antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection

When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection

- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection

If a speaker is not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker is connected correctly.

Warnhinweise

Installieren Sie das Gerät unbedingt im Armaturenbrett des Fahrzeugs, denn die Rückseite des Geräts erwärmt sich bei Betrieb.

- Dieses Gerät ist ausschließlich für den Betrieb bei 12 V Gleichstrom (negative Erdung) bestimmt.
- Achten Sie darauf, dass die Kabel nicht unter einer Schraube oder zwischen beweglichen Teilen wie z. B. in einer Sitzschiene eingeklemmt werden.
- Schalten Sie, bevor Sie irgendwelche Anschlüsse vornehmen, die Zündung des Fahrzeugs aus, um Kurzschlüsse zu vermeiden.
- Verbinden Sie das Stromversorgungskabel ③ mit dem Gerät und den Lautsprechern, bevor Sie es mit dem Hilfsstromanschluss verbinden.
- **Schließen Sie alle Erdungskabel an einem gemeinsamen Massepunkt an.**
- Aus Sicherheitsgründen müssen alle losen, nicht angeschlossenen Drähte mit Isolierband abisoliert werden.

Hinweise zum Stromversorgungskabel (gelb)

- Wenn Sie dieses Gerät zusammen mit anderen Stereokomponenten anschließen, muss der Autostromkreis, an den die Geräte angeschlossen sind, eine höhere Leistung aufweisen als die Summe der Sicherungen der einzelnen Komponenten.
- Wenn kein Autostromkreis eine so hohe Leistung aufweist, schließen Sie das Gerät direkt an die Batterie an.

Anschlussdiagramm 2

Warnung

Wenn Sie eine Motorantenne ohne Relaiskästchen verwenden, kann durch Anschließen dieses Geräts mit dem mitgelieferten Stromversorgungskabel ③ die Antenne beschädigt werden.

Steuer- und Stromversorgungsleitungen

- *Die Motorantennen-Steuerleitung (blau) liefert +12 V Gleichstrom, wenn Sie den Tuner einschalten oder die AF- (Alternativfrequenzsuche) oder die TA-Funktion (Verkehrsdurchsagen) aktivieren.*
- *Wenn das Fahrzeug mit einer in der Heck-/Seitenfensterscheibe integrierten FM (UKW)/MW/LW-Antenne ausgestattet ist, schließen Sie die Motorantennen-Steuerleitung (blau) oder die Zubehörstromversorgungsleitung (rot) an den Stromversorgungsanschluss des vorhandenen Antennenverstärkers an. Näheres dazu erfahren Sie bei Ihrem Händler.*
- *Es kann nur eine Motorantenne mit Relaiskästchen angeschlossen werden.*

2

* Note for the antenna (aerial) connecting
If your car antenna (aerial) is an ISO (International Organization for Standardization) type, use the supplied adaptor ① to connect it. First connect the car antenna (aerial) to the supplied adaptor, then connect it to the antenna (aerial) jack of the master unit.

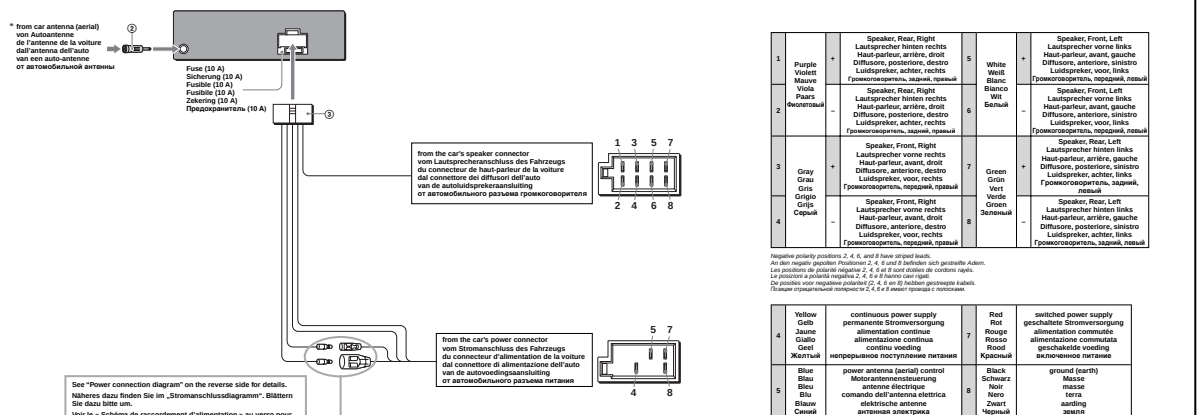
* Hinweis zum Anschließen der Antenne
Wenn Ihre Autoantenne der ISO-Norm (Internationale Normungsgemeinschaft) entspricht, schließen Sie sie mithilfe des mitgelieferten Adapters ① an. Verbinden Sie zuerst die Autoantenne mit dem mitgelieferten Adapter und verbinden Sie diesen dann mit der Antennenbuchse des Hauptgeräts.

* Remarque sur le raccordement de l'antenne
Si votre antenne de voiture est de type ISO (Organisation internationale de normalisation), utilisez l'adaptateur fourni ① pour la raccorder. Raccordez d'abord l'antenne de voiture à l'adaptateur fourni et, ensuite, à la prise d'antenne de l'appareil principal.

* Nota per il collegamento dell'antenna
Se l'antenna dell'auto è di tipo ISO (International Organization for Standardization), utilizzare l'adattatore ① in dotazione per collegarla. Collegare prima l'antenna della macchina all'adattatore in dotazione, quindi collegarla alla presa dell'antenna dell'apparecchio principale.

* Opmerking bij de antenne-aansluiting
Indien uw auto is uitgerust met een antenne van het type ISO (International Organisation for Standardization), moet u die aansluiten met behulp van de bijgeleverde adapter ①. Sluit eerst de auto-antenne aan op de bijgeleverde adapter en vervolgens de antennestekker op het hoofdtoestel.

* Примечание о подсоединении антенны
Если антенна в Вашем автомобиле относится к типу, утвержденному ISO (Международной организацией по стандартизации), используйте для ее подсоединения переходник ①. Сначала подсоедините автомобильную антенну к прилагаемому переходнику, а затем к антенному гнезду аппарата.


* from car antenna (aerial)
von Autoantenne
de l'antenne de la voiture
dall'antenna dell'auto
van een auto-antenne
от автомобильной антенны
Fuse (10 A)
Sicherung (10 A)
Fusible (10 A)
Fusibile (10 A)
Zekering (10 A)
Предохранитель (10 A)
from the car's speaker connector
vom Lautsprecheranschluss des Fahrzeugs
du connecteur de haut-parleur de la voiture
dal connettore dei diffusori dell'auto
van de autoluidsprekeraansluiting
от автомобильного разъема громкоговорителя
1 3 5 7
2 4 6 8
from the car's power connector
vom Stromanschluss des Fahrzeugs
du connecteur d'alimentation de la voiture
dal connettore di alimentazione dell'auto
van de autovoedingsaansluiting
от автомобильного разъема питания
5 7
4 8
See "Power connection diagram" on the reverse side for details.
Näheres dazu finden Sie im „Stromanschlussdiagramm". Blättern Sie dazu bitte um.
Voir le « Schéma de raccordement d'alimentation » au verso pour plus de détails.
Per ulteriori informazioni, vedere "Diagramma dei collegamenti di alimentazione" che si trova sul retro.
Zie "Voedingsaansluitschema" op de achterkant voor meer details.
Подробнее см. в разделе "Схема подключения питания" на обратной стороне.

1	Purple Violett Mauve Viola Paars Фиолетовый	+	Speaker, Rear, Right Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts Громкоговоритель, задний, правый	5	White Weiß Blanc Bianco Wit Белый	+	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links Громкоговоритель, передний, левый
2		–	Speaker, Rear, Left Lautsprecher hinten rechts Haut-parleur, arrière, droit Diffusore, posteriore, destro Luidspreker, achter, rechts Громкоговоритель, задний, правый	6		–	Speaker, Front, Left Lautsprecher vorne links Haut-parleur, avant, gauche Diffusore, anteriore, sinistro Luidspreker, voor, links Громкоговоритель, передний, левый
3	Gray Grau Gris Grigio Grijs Серый	+	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts Громкоговоритель, передний, правый	7	Green Grün Vert Verde Groen Зеленый	+	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links Громкоговоритель, задний, левый
4		–	Speaker, Front, Right Lautsprecher vorne rechts Haut-parleur, avant, droit Diffusore, anteriore, destro Luidspreker, voor, rechts Громкоговоритель, передний, правый	8		–	Speaker, Rear, Left Lautsprecher hinten links Haut-parleur, arrière, gauche Diffusore, posteriore, sinistro Luidspreker, achter, links Громкоговоритель, задний, левый

Negative polarity positions 2, 4, 6, and 8 have striped leads.
An den negativ gepolten Positionen 2, 4, 6 und 8 befinden sich gestreifte Adern.
Les positions de polarité négative 2, 4, 6 et 8 sont dotées de cordons rayés.
Le posizioni a polarità negativa 2, 4, 6 e 8 hanno cavi rigati.
De posities voor negatieve polariteit (2, 4, 6 en 8) hebben gestreepte kabels.
Позиции отрицательной полярности 2, 4, 6 и 8 имеют провода с полосками.

4	Yellow Gelb Jaune Giallo Geel Желтый	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding непрерывное поступление питания		7	Red Rot Rouge Rosso Rood Красный	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding включенное питание	
5	Blue Blau Bleu Blu Blauw Синий	power antenna (aerial) control Motorantennensteuerung antenne électrique comando dell'antenna elettrica elektrische antenne антенная электрика		8	Black Schwarz Noir Nero Zwart Черный	ground (earth) Masse masse terra aarding земля	

Positions 1, 3, and 5 do not have pins.
An Position 1, 3, 5 sind 6 Befinden sich keine Stifte.
Les positions 1, 3 et 5 ne comportent pas de broches.
Le posizioni 1, 3 e 5 non hanno piedini.
De posities 1, 3 en 5 hebben geen pins.
Позиции 1, 3 и 5 не имеют контактных штырьков.

Précautions

Installez cet appareil sur le tableau de bord de la voiture, car l'arrière de l'appareil chauffe en cours d'utilisation.

- Cet appareil est conçu pour fonctionner uniquement sur un courant continu de 12 V avec masse négative.
- Evitez de coincer les câbles sous des vis ou dans des pièces mobiles (par exemple, armature de siège).
- Avant d'effectuer des raccordements, éteignez le moteur pour éviter les courts-circuits.
- Branchez le câble d'alimention ③ sur l'appareil et les haut-parleurs avant de le brancher sur le connecteur d'alimentation auxiliaire.
- **Rassemblez tous les câbles de mise à la masse en un point de masse commun.**
- Veillez à isoler tout câble ou câble non connecté avec du ruban isolant.

Remarques sur le câble d'alimentation (jaune)

- Lorsque cet appareil est raccordé à d'autres équipements stéréo, la valeur nominale des circuits du véhicule raccordés doit être supérieure à la somme des fusibles de chaque élément.
- Si aucun circuit de la voiture n'est assez puissant, raccordez directement l'appareil à la batterie.

Schémas de raccordement 2

Avertissement

Si vous disposez d'une antenne électrique sans boîtier de relais, le branchement de cet appareil au moyen du câble d'alimentation fourni ③ risque d'endommager l'antenne.

Remarques sur les câbles de commande et d'alimentation

- *Le câble de commande d'antenne (bleu) fournit du courant continu de +12 V lorsque vous mettez le tuner sous tension ou lorsque vous activez la fonction AF (fréquence alternative) ou TA (messages de radiodiffusage).*
- *Lorsque votre voiture est équipée d'une antenne FM/MW (GO)/LW (PO) intégrée dans la vitre arrière/latérale, raccordez le câble de commande d'antenne (bleu) ou le câble d'alimentation des accessoires (rouge) à la borne d'alimentation de l'amplificateur d'antenne existant. Pour plus de détails, consultez votre revendeur.*
- *Une antenne électrique sans boîtier de relais ne peut pas être utilisée avec cet appareil.*

Raccordement pour la conservation de la mémoire

Lorsque le câble d'alimentation jaune est connecté, le circuit de la mémoire est alimenté en permanence même si la clé de contact est en position d'arrêt.

Remarques sur le raccordement des haut-parleurs

- *Avant de raccorder les haut-parleurs, mettez l'appareil hors tension.*
- *Utilisez des haut-parleurs ayant une impédance de 4 à 8 ohms et une capacité adéquate sous peine de les endommager.*
- *Ne raccordez pas les bornes du système de haut-parleurs au châssis de la voiture et ne pas connecter les bornes du haut-parleur droit à celles du haut-parleur gauche.*
- *Ne raccordez pas le câble de mise à la masse de cet appareil à la borne négative (–) du haut-parleur.*
- *Ne tentez pas de raccorder les haut-parleurs en parallèle.*
- *Connectez uniquement des haut-parleurs passifs. La connexion de haut-parleurs actifs (avec des amplificateurs intégrés) aux bornes des haut-parleurs pourrait endommager l'appareil.*
- *Pour éviter tout dysfonctionnement, n'utilisez pas les câbles des haut-parleurs intégrés installés dans votre voiture si l'appareil dispose d'un câble négatif commun (–) pour les haut-parleurs droit et gauche.*
- *Ne raccordez pas entre eux les cordons des haut-parleurs de l'appareil.*

Remarque sur le raccordement

Si les haut-parleurs ne sont pas raccordés correctement, le message « FAILURE » s'affiche. Dans ce cas, assurez-vous que les haut-parleurs sont raccordés correctement.

Attenzione

Assicurarsi di installare l'apparecchio nel cruscotto dell'auto, poiché la parte posteriore dell'apparecchio stesso si surriscalda durante l'uso.

- Questo apparecchio è stato progettato per l'uso solo a 12 V CC con massa negativa.
- Evitare che i cavi rimangano bloccati da una vite o incastrati nelle parti mobili (ad esempio nelle guide scorrevoli del sedili).
- Prima di effettuare i collegamenti, spegnere il motore dell'automobile onde evitare di causare cortocircuiti.
- Collegare il cavo di alimentazione ③ all'apparecchio e ai diffusori prima di collegarlo al connettore di alimentazione ausiliare.
- **Portare tutti i cavi di messa a terra a un punto di massa comune.**
- Per sicurezza, assicurarsi di isolare qualsiasi cavo non collegato utilizzando del nastro adesivo.

Note sul cavo di alimentazione (giallo)

- Se questo apparecchio viene collegato in combinazione con altri componenti stereo, la potenza nominale dei circuiti dell'automobile deve essere superiore a quella prodotta dalla somma dei fusibili di ciascun componente.
- Se la potenza nominale dei circuiti dell'automobile non è sufficiente, collegare l'apparecchio direttamente alla batteria.

Schema di collegamento 2

Avvertenza

Quando si collega l'apparecchio con il cavo di alimentazione in dotazione ③, si potrebbe danneggiare l'antenna elettrica se questa non dispone di scatola a relè.

Note sul cavi di controllo e di alimentazione

- *Il cavo (blu) di controllo dell'antenna elettrica fornisce alimentazione pari a +12 V CC quando si attiva il sintonizzatore oppure la funzione TA (notiziario sul traffico) o AF (frequenza alternativa).*
- *Se l'automobile è dotata di antenna FM/MW/LW incorporata nel vetro posteriore/laterale, collegare il cavo (blu) di controllo dell'antenna elettrica o il cavo (rosso) di ingresso dell'alimentazione accessoria al terminale di alimentazione dell'amplificatore di potenza dell'antenna esistente. Per ulteriori informazioni, consultare il proprio rivenditore.*
- *Non è possibile usare un'antenna elettrica senza scatola a relè con questo apparecchio.*

Collegamento per la conservazione della memoria

Quando il cavo di alimentazione giallo è collegato, viene sempre fornita alimentazione al circuito di memoria anche quando l'interruttore di accensione è spento.

Note sul collegamento dei diffusori

- *Prima di collegare i diffusori spegnere l'apparecchio.*
- *Usare diffusori di impedenza compresa tra 4 e 8 ohm e con capacità di potenza adeguata, altrimenti i diffusori potrebbero venir danneggiati.*
- *Non collegare i terminali del sistema diffusori al telaio dell'auto e non collegare i terminali del diffusore destro a quelli del diffusore sinistro.*
- *Non collegare il cavo di terra di questo apparecchio al terminale negativo (–) del diffusore.*
- *Non collegare i diffusori in parallelo.*
- *Assicurarsi di collegare soltanto diffusori passivi, poiché il collegamento di diffusori attivi, dotati di amplificatori incorporati, ai terminali dei diffusori potrebbe danneggiare l'apparecchio.*
- *Per evitare problemi di funzionamento, non utilizzare i cavi dei diffusori incorporati installati nell'automobile se l'apparecchio condivide un cavo comune negativo (–) per i diffusori destro e sinistro.*
- *Non collegare fra loro i cavi dei diffusori dell'apparecchio.*

Nota sui collegamenti

Se il diffusore non è collegato correttamente, "FAILURE" viene visualizzato nel display. In tal caso, accertarsi che il diffusore sia collegato correttamente.

Let op

Installeer dit apparaat in het dashboard van de auto omdat de achterkant van het apparaat tijdens gebruik heet kan worden.

- Dit apparaat is ontworpen voor gebruik op een auto-accu van 12 V gelijkstroom, negatieve aarde.
- Zorg ervoor dat de draden niet onder een schroef of tussen bewegende onderdelen (b.v. zetelrail) terechtkomen.
- Voordat u de aansluitingen maakt, moet u het contact uitzetten om kortsluiting te vermijden.
- Sluit de voedingskabel ③ aan op het apparaat en de luidsprekers voordat u het aansluit op de hulpvoedingsaansluiting.
- **Sluit alle aardingskabels op een gemeenschappelijk aardpunt aan.**
- Voorzie niet aangesloten kabels om veiligheidsredenen altijd van isolatietape.

Opmerkingen bij de voedingskabel (geel)

- Wanneer u dit apparaat aansluit samen met andere componenten, moet het vermogen van de aangesloten autostroomkring groter zijn dan de som van de zekeringen van elke component afzonderlijk.
- Wanneer het vermogen ontoereikend is, moet u het apparaat rechtstreeks aansluiting op de accu.

Aansluitschema 2

Waarschuwing

Indien u een elektrische antenne hebt zonder relaiskast, kan het aansluiten van deze eenheid met de bijgeleverde voedingskabel ③ de antenne beschadigen.

Opmerkingen over de bedienings- en voedingskabels

- *De bedieningskabel van de elektrische antenne (blauw) levert +12 V gelijkstroom wanneer u de tuner inschakelt of de AF- (alternatieve frequenties) of TA (verkeersinformatie) functie activeert.*
- *Wanneer uw auto is uitgerust met een FM/MW/LW-antenne in de achterruit/voorruit, moet u de bedieningskabel van de elektrische antenne (blauw) of de voedingskabel van de accessoires (rood) aansluiten op de voedingsingang van de bestaande antenneversterker. Raadpleeg uw dealer voor meer details.*
- *Met dit apparaat is het niet mogelijk een elektrische antenne zonder relaiskast te gebruiken.*

Instandhouden van het geheugen

Zolang de gele voedingskabel is aangesloten, blijft de stroomvoorziening van het geheugen intact, ook wanneer de contactsleutel van de auto wordt uitgeschakeld.

Opmerkingen betreffende het aansluiten van de luidsprekers

- *Zorg dat het apparaat is uitgeschakeld, alvorens de luidsprekers aan te sluiten.*
- *Gebruik luidsprekers met een impedantie van 4 tot 8 Ohm en let op dat die het vermogen van de versterker kunnen verweren. Als dit wordt verzuimd, kunnen de luidsprekers ernstig beschadigd raken.*
- *Verbind in geen geval de aansluitingen van de luidsprekers met het chassis van de auto en sluit de aansluitingen van de rechter- en linkerluidspreker niet op elkaar aan.*
- *Verbind de aarddraad van dit apparaat niet met de negatieve (–) aansluiting van de luidspreker.*
- *Probeer nooit de luidsprekers parallel aan te sluiten.*
- *Sluit geen actieve luidsprekers (met ingebouwde versterkers) aan op de luidsprekeraansluiting van dit apparaat. Dit zal leiden tot beschadiging van de actieve luidsprekers. Sluit dus alltijd uitsluitend luidsprekers zonder ingebouwde versterker aan.*
- *Om defecten te vermijden mag u de bestaande luidsprekerbedrading in uw auto niet gebruiken wanneer er een gemeenschappelijke negatieve (–) draad is voor de rechter- en linkerluidsprekers.*
- *Verbind de luidsprekerdraden niet met elkaar.*

Opmerking over aansluiten

Als de luidspreker niet goed is aangesloten, wordt "FAILURE" in het display weergegeven. In dit geval moet u zorgen dat de luidspreker correct is aangesloten.

Внимание

Обязательно устанавливайте это устройство на приборной панели автомобиля, так как его задняя часть нагревается во время работы.

- Данный аппарат для подключения только к аккумулятору 12 В постоянного тока с отрицательным заземлением.
- Не допускайте попадания проводов под винты или между подвижными деталями (например, между направляющими сидений).
- Перед выполнением соединения выключите зажигание автомобиля во избежание короткого замыкания.
- Сначала подсоедините провод питания ③ к аппарату и громкоговорителям, а затем к контактам внешнего источника питания.
- **Подведите все провода заземления к одной точке заземления.**
- В целях безопасности обязательно изолируйте все свободные неподсоединенные провода изоляционной лентой.

Примечания относительно провода питания (желтого)

- При подключении этого аппарата вместе с другими стереокомпонентами номинальное значение силы тока в контуре питания автомобиля должно превышать суммарное значение силы тока, указанное на предохранителях всех компонентов.
- Если номинальное значение силы тока в контуре питания автомобиля не достаточно высокое, подсоедините аппарат напрямую к аккумулятору.

Схема подсоединения 2

Предостережение

Если Вы используете антенну с электрическим приводом без релейного блока, подсоединение этого аппарата посредством прилагаемого провода питания ③ может привести к повреждению антенны.

О проводах управления и питания

- *При включении тюнера, а также использовании функции AF (Альтернативные частоты) или TA (Сообщения о текущей ситуации на дорогах) по проводу питания приемной антенны (синему) подается напряжение +12 В постоянного тока.*
- *Если на заднем/боковом стекле автомобиля установлена встроенная антенна диапазона FM/MW/LW, подсоедините провод питания приемной антенны (синий) или провод питания аппарата (красный) к клемме питания существующего усилителя антенны. Чтобы получить дополнительные сведения, обратитесь к своему дилеру.*
- *Антенна с электрическим приводом, не снабженная релейным блоком, с этим аппаратом использоваться не может.*

Подсоединение для поддержки памяти

Когда к аппарату подсоединен желтый электрический провод, блок памяти будет постоянно получать питание даже при выключенном зажигании.

Примечания относительно подсоединения громкоговорителей

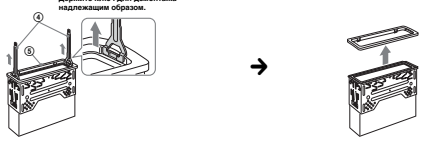
- *Прежде чем подсоединять громкоговорители, выключите аппарат.*
- *Используйте громкоговорители с полным сопротивлением 4 - 8 Ом, обладающие способностью принимать достаточно мощный сигнал. В противном случае они могут быть повреждены.*
- *Не подсоединяйте контактные гнезда громкоговорителей к шасси автомобиля и не соединяйте гнезда правого громкоговорителя с гнездами левого.*
- *Не подключайте провод заземления аппарата к отрицательному (–) контакту громкоговорителя.*
- *Не пытайтесь подсоединить громкоговорители параллельно.*
- *Подсоединять можно только пассивные громкоговорители. Подсоединение активных громкоговорителей (со встроенным усилителем) к гнездам для громкоговорителей может привести к повреждению аппарата.*
- *Во избежание неправильной работы аппарата не используйте встроенные в автомобиль провода громкоговорителей, если используется общий отрицательный провод (–) для правого и левого громкоговорителей.*
- *Не подсоединяйте друг к другу провода громкоговорителей аппарата.*

Примечание относительно подсоединения

Если громкоговоритель и усилитель подсоединены неправильно, на дисплее отобразится надпись "FAILURE". В этом случае проверьте правильность подсоединения громкоговорителя и усилителя.

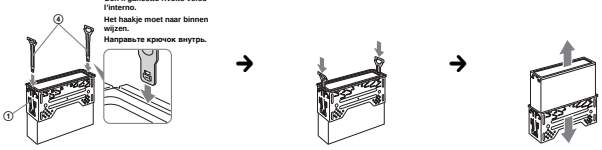
3 **1**

Orient the release key correctly.
Richten Sie den Löseschlüssel korrekt aus.
Orientez correctement la clé de déblocage.
Orientare la chiavetta di rilascio nel modo corretto.
Plaats de ontgrendelingssleutel op de juiste manier.
Держите ключ для демонтажа надлежащим образом.

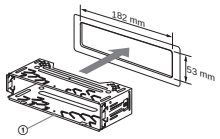


2

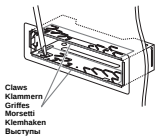
Face the hook inwards.
Der Haken muss nach innen weisen.
Tournez le crochet vers l'intérieur.
Con il gancetto rivolto verso l'interno.
Het haakje moet naar binnen wijzen.
Направьте крючок внутрь.



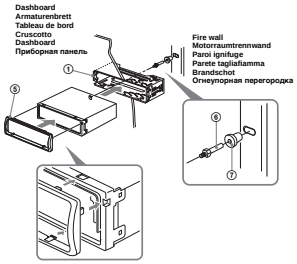
4 **1**



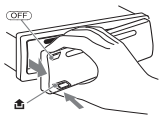
2



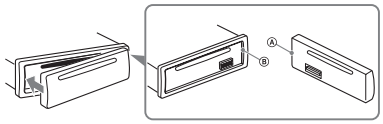
3



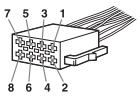
5 **A**



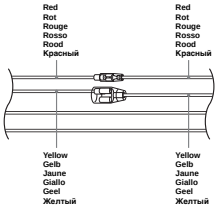
B



Auxiliary power connector
Hilfsstromanschluss
Connecteur d'alimentation auxiliaire
Connettore di alimentazione ausiliare
Hulpvoedingsaansluiting
Вспомогательный разъем питания

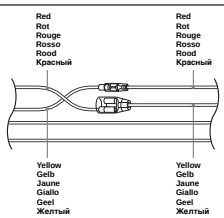


a



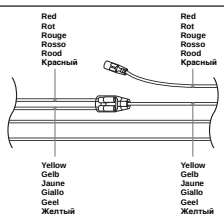
4	Yellow Gelb Jaune Giallo Geel Желтый	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding непрерывное поступление питания	7	Red Rot Rouge Rosso Rood Красный	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding включенное питание

b



4	Yellow Gelb Jaune Giallo Geel Желтый	switched power supply geschaltete Stromversorgung alimentation commutée alimentazione commutata geschakelde voeding включенное питание	7	Red Rot Rouge Rosso Rood Красный	continuous power supply permanente Stromversorgung alimentation continue alimentazione continua continu voeding непрерывное поступление питания

c



the car without ACC position
Fahrzeug ohne Zubehörposition (ACC)
Véhicule sans position ACC
Auto priva della posizione ACC
Auto zonder ACC-positie
автомобиль не имеет положения ACC

Power connection diagram

Auxiliary power connector may vary depending on the car. Check your car's auxiliary power connector diagram to make sure the connections match correctly. There are three basic types (illustrated below). You may need to switch the positions of the red and yellow leads in the car stereo's power supply lead.
After matching the connections and switched power supply leads correctly, connect the unit to the car's power supply. If you have any questions and problems connecting your unit that are not covered in this manual, please consult the car dealer.

Diagramma dei collegamenti di alimentazione

Il connettore di alimentazione ausiliare può variare a seconda della macchina. Controllare il diagramma del connettore di alimentazione ausiliare della macchina per essere sicuri che i collegamenti corrispondano correttamente. Vi sono tre tipi di base (illustrazione sotto). Potrà essere necessario cambiare le posizioni dei fili rosso e giallo nel cavo di alimentazione dello stereo della macchina.
Dopo aver fatto corrispondere i collegamenti e aver commutato i fili di alimentazione, collegare l'apparecchio all'alimentazione della macchina. Se si hanno domande o se sorgono problemi che non sono stati trattati nel manuale nel collegare l'apparecchio, contattare l'autoconcessionario.

Stromanschlussdiagramm

Der Hilfsstromanschluss kann je nach Fahrzeugtyp unterschiedlich sein. Sehen Sie im Hilfsstromanschlussdiagramm für Ihr Fahrzeug nach, wie die Verbindung ordnungsgemäß vorgenommen werden muss. Es gibt, wie unten abgebildet, drei grundlegende Typen. Sie müssen möglicherweise die rote und gelbe Leitung des Stromversorgungskabels der Autostereoanlage vertauschen.
Stellen Sie die Anschlüsse her, schließen Sie die geschalteten Stromversorgungsleitungen richtig an und verbinden Sie dann das Gerät mit der Stromversorgung Ihres Fahrzeugs. Wenn beim Anschließen des Geräts Fragen oder Probleme auftreten, die in dieser Anleitung nicht erläutert werden, wenden Sie sich bitte an den Autohändler.

Voedingsaansluitschema

De hulpvoedingsaansluiting kan verschillen afhankelijk van de auto. Controleer het hulpvoedingsaansluitschema dat bij dit apparaat wordt geleverd om te zien of de aansluitingen kloppen. Er zijn drie basistypes (zie afbeelding hieronder). Het is mogelijk dat u de posities van de rode en gele kabels in de voedingskabel van het car audiosysteem moet omwisselen.
Als de aansluitingen en geschakelde voedingskabels kloppen, sluit u het apparaat aan op de voeding van de auto. Indien u nog vragen of problemen hebt in verband met het aansluiten van het apparaat die niet in deze handleiding vermeld staan, raadpleeg dan de autodealer.

Schéma de raccordement d'alimentation

Le connecteur d'alimentation auxiliaire peut varier suivant le type de voiture. Vérifiez le schéma du connecteur d'alimentation auxiliaire de votre voiture pour vous assurer que les connexions correspondent. Il en existe trois types de base (illustrés ci-dessous). Il se peut que vous deviez commuter la position du fil rouge et jaune du câble d'alimentation de l'autoradio.
Après avoir établi les connexions et commuté correctement les câbles d'alimentation, raccordez l'appareil à l'alimentation de la voiture. Si vous avez des questions ou des difficultés à propos de cet appareil qui ne sont pas abordées dans le présent mode d'emploi, consultez votre concessionnaire automobile.

Схема подключения питания

В разных автомобилях могут использоваться разные разъемы вспомогательного питания. Чтобы убедиться в правильности подсоединения, обратитесь к схеме разъема для подключения вспомогательного питания Вашего автомобиля. Есть три основных типа (как показано на рисунке ниже). Возможно, Вам придется поменять местами подключение красного и желтого проводов в соединительном кабеле питания стереосистемы.
После проверки правильности подключения в разъемах подключите аппарат к электропитанию автомобиля. Если у Вас есть какие-либо вопросы или проблемы, связанные с подключением аппарата, которые не рассматриваются в настоящем руководстве, обратитесь за советом к дилеру автомобильной фирмы.

Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperature, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 45°.

Removing the protection collar and the bracket 3

Before installing the unit, remove the protection collar ⑤ and the bracket ① from the unit.

1 **Remove the protection collar ⑤.**
- ❶ Engage the release keys ④ together with the protection collar ⑤.
- ❷ Pull out the release keys ④ to remove the protection collar ⑤.

2 **Remove the bracket ①.**
- ❶ Insert both release keys ④ together between the unit and the bracket ① until they click.
- ❷ Pull down the bracket ①, then pull up the unit to separate.

Mounting example 4

Installation in the dashboard

Notes
- *Bend these claws outward for a tight fit, if necessary (4-2).*
- *Make sure that the 4 catches on the protection collar ⑤ are properly engaged in the slots of the unit (4-3).*

How to detach and attach the front panel 5

Before installing the unit, detach the front panel.

5-A To detach

Before detaching the front panel, be sure to press (OFF). Press ⏏, and pull it off towards you.

5-B To attach

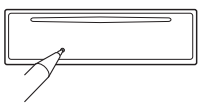
Engage part Ⓐ of the front panel with part Ⓑ of the unit, as illustrated, and push the left side into position until it clicks.

Warning if your car's ignition has no ACC position

Be sure to set the Auto Off function. For details, see the supplied Operating Instructions.
The unit will shut off completely and automatically in the set time after the unit is turned off, which prevents battery drain.
If you do not set the Auto Off function, press and hold (OFF) until the display disappears each time you turn the ignition off.

RESET button

When the installation and connections are completed, be sure to press the RESET button with a ballpoint pen, etc., after detaching the front panel.



Sicherheitshinweise

- Wählen Sie den Einbauort sorgfältig so aus, dass das Gerät beim Fahren nicht hinderlich ist.
- Bauen Sie das Gerät so ein, dass es keinen hohen Temperaturen (keinem direkten Sonnenlicht, keiner Warmluft von der Heizung), keinem Staub, keinem Schmutz und keinen starken Vibrationen ausgesetzt ist.
- Für eine sichere Befestigung verwenden Sie stets die mitgelieferten Montageteile.

Hinweis zum Montagewinkel

Das Gerät sollte in einem Winkel von weniger als 45° montiert werden.

Abnehmen der Schutzumrandung und der Halterung 3

Nehmen Sie vor dem Installieren des Geräts die Schutzumrandung ⑤ und die Halterung ① vom Gerät ab.

1 **Entfernen Sie die Schutzumrandung ⑤.**
- ❶ Setzen Sie beide Löseschlüssel ④ an der Schutzumrandung ⑤ an.
- ❷ Ziehen Sie die Schutzumrandung ⑤ mithilfe der Löseschlüssel ④ heraus.

2 **Entfernen Sie die Halterung ①.**
- ❶ Führen Sie beide Löseschlüssel ④ zwischen dem Gerät und der Halterung ① ein, bis sie mit einem Klicken einrasten.
- ❷ Ziehen Sie die Halterung ① nach unten und das Gerät nach oben, um die beiden zu trennen.

Montagebeispiel 4

Installation im Armaturenbrett

Hinweise
- *Falls erforderlich, biegen Sie diese Klammern für einen sicheren Halt nach außen (4-2).*
- *Achten Sie darauf, die 4 Verriegelungen an der Schutzumrandung ⑤ korrekt in die Aussparungen am Gerät einzusetzen (4-3).*

Abnehmen und Anbringen der Frontplatte 5

Nehmen Sie die Frontplatte vor dem Einbau des Geräts ab.

5-A Abnehmen

Schalten Sie das Gerät vor dem Abnehmen der Frontplatte unbedingt mit (OFF) aus. Drücken Sie ⏏ und ziehen Sie sie auf sich zu heraus.

5-B Anbringen

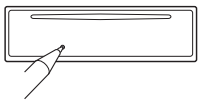
Setzen Sie Teil Ⓐ der Frontplatte wie in der Abbildung dargestellt an Teil Ⓑ des Geräts an und drücken Sie die linke Seite der Frontplatte an, bis sie mit einem Klicken einrastet.

Warnhinweis, wenn die Zündung Ihres Fahrzeugs nicht über eine Zubehörposition (ACC oder I) verfügt

Aktivieren Sie unbedingt die Abschaltautomatik.
Näheres dazu finden Sie in der mitgelieferten Bedienungsanleitung.
Nach dem Ausschalten wird das Gerät dann nach der voreingestellten Zeit automatisch vollständig abgeschaltet, so dass der Autobatterie kein Strom mehr entzogen wird.
Wenn Sie die Abschaltautomatik nicht aktivieren, müssen Sie jedes Mal, wenn Sie die Zündung ausschalten, die Taste (OFF) gedrückt halten, bis die Anzeige ausgeblendet wird.

Taste RESET

Wenn Sie das Gerät eingebaut und alle Anschlüsse vorgenommen haben, müssen Sie die Frontplatte abnehmen und mit einem Kugelschreiber oder einem anderen spitzen Gegenstand die Taste RESET drücken.



Précautions

- Choisissez soigneusement l'emplacement de l'installation afin que l'appareil ne gêne pas la conduite normale du véhicule.
- Evitez d'installer l'appareil dans un endroit exposé à de la poussière, de la saleté, des vibrations violentes ou à des températures élevées, comme en plein soleil ou à proximité d'un conduit de chauffage.
- Pour garantir un montage sûr, n'utilisez que le matériel fourni.

Réglage de l'angle de montage

Réglez l'inclinaison à un angle inférieur à 45°.

Retrait du tour de protection et du support 3

Avant d'installer l'appareil, retirez le tour de protection ⑤ et le support ① de l'appareil.

1 **Enclenchez le tour de protection ⑤.**
- ❶ Retirez les clés de déblocage ④ simultanément dans le tour de protection ⑤.
- ❷ Tirez sur la clé de déblocage ④ pour retirer le tour de protection ⑤.

2 **Retirez le support ①.**
- ❶ Insérez les deux clés de déblocage ④ simultanément entre l'appareil et le support ① jusqu'au déclic indiquant qu'elles sont en place.
- ❷ Tirez le support ① vers le bas, puis tirez l'appareil vers le haut pour les séparer.

Exemple de montage 4

Installation dans le tableau de bord

Remarques
- *Pliez ces griffes pour assurer une prise correcte si nécessaire (4-2).*
- *Assurez-vous que les 4 loquets du tour de protection ⑤ sont correctement insérés dans les fentes de l'appareil (4-3).*

Retrait et fixation de la façade 5

Avant d'installer l'appareil, retirez la façade.

5-A Pour la retirer

Avant de retirer la façade, n'oubliez pas d'appuyer sur (OFF). Appuyez ensuite sur ⏏, puis faites glisser la façade vers vous.

5-B Pour la fixer

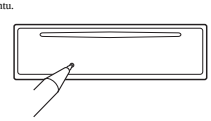
Fixez la partie Ⓐ de la façade sur la partie Ⓑ de l'appareil, comme indiqué sur l'illustration, puis appuyez sur le côté gauche jusqu'au déclic.

Avertissement au cas où le contact de votre voiture ne dispose pas d'une position ACC

Veillez à régler la fonction de mise hors tension automatique. Pour obtenir davantage d'informations, reportez-vous au mode d'emploi fourni.
L'appareil s'éteint complètement et automatiquement après le laps de temps choisi une fois l'appareil mis hors tension afin d'éviter que la batterie ne se décharge.
Si vous ne réglez pas la fonction de mise hors tension automatique, appuyez sur la touche (OFF) et maintenez-la enfoncée jusqu'à ce que l'affichage disparaisse à chaque fois que vous coupez le contact.

Touche RESET

Une fois que l'installation et les raccordements sont terminés, retirez la façade et appuyez sur le bouton RESET à l'aide d'un stylo à bille ou d'un autre objet pointu.



Precauzioni

- Scegliere con attenzione la posizione per l'installazione in modo che l'apparecchio non interferisca con le operazioni di guida del conducente.
- Evitare di installare l'apparecchio dove sia soggetto ad alte temperature, come alla luce solare diretta o al getto di aria calda dell'impianto di riscaldamento, o dove possa essere soggetto a polvere, sporco e vibrazioni eccessive.
- Usare solo il materiale di montaggio in dotazione per un'installazione stabile e sicura.

Regolazione dell'angolo di montaggio

Regolare l'angolo di montaggio in modo che sia inferiore a 45°.

Rimozione della staffa e della cornice protettiva 3

Prima di installare l'apparecchio, rimuovere la cornice protettiva ⑤ e la staffa ① dall'apparecchio.

1 **Rimuovere la cornice protettiva ⑤.**
- ❶ Inserire le chiavette di rilascio ④ nella cornice protettiva ⑤.
- ❷ Per rimuovere la cornice protettiva ⑤ estrarre le chiavette di rilascio ④.

2 **Rimuovere la staffa ①.**
- ❶ Inserire contemporaneamente entrambe le chiavette di rilascio ④ tra l'apparecchio e la staffa ① fino a che non scattano in posizione.
- ❷ Estrarre la staffa ①, quindi sollevare l'apparecchio per rimuoverlo.

Esempio di montaggio 4

Installazione nel cruscotto

Note
- *Piegare verso l'esterno questi morsetti per un'installazione più sicura, se necessario (4-2).*
- *Assicurarsi che i 4 fermi sulla cornice protettiva ⑤ siano correttamente inseriti negli alloggiamenti dell'apparecchio (4-3).*

Come rimuovere e reinserire il pannello anteriore 5

Prima di installare l'apparecchio rimuovere il pannello anteriore.

5-A Per rimuoverlo

Prima di rimuovere il pannello anteriore, premere (OFF). Premere ⏏, quindi tirare verso di sé il pannello anteriore.

5-B Per reinserirlo

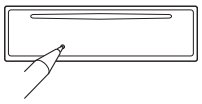
Applicare la parte Ⓐ del pannello anteriore alla parte Ⓑ dell'apparecchio come mostrato nell'illustrazione e premere il lato sinistro fino a sentire uno scatto.

Avvertenza relativa all'installazione su un'auto sprovvista della posizione ACC (accessoria) sul blocchetto di accensione

Accertarsi di impostare la funzione di spegnimento automatico. Per ulteriori informazioni, fare riferimento alle istruzioni per l'uso in dotazione.
L'apparecchio si spegne completamente e automaticamente all'ora impostata dopo che è stato disattivato, onde evitare che la batteria si scarichi.
Se la funzione di spegnimento automatico non è stata impostata, ogni volta che il motore viene spento tenere premuto (OFF) finché il display non viene disattivato.

Tasto RESET

Una volta completate le procedure di installazione e i collegamenti, accertarsi di premere il tasto RESET con una penna a sfera o un oggetto simile dopo avere rimosso il pannello anteriore.



Voorzorgsmaatregelen

- Kies de installatieplaats zorgvuldig zodat het apparaat de bestuurder niet hindert tijdens het rijden.
- Installeer het apparaat niet op plaatsen waar het blootgesteld wordt aan hoge temperaturen, b.v. in direct zonlicht of bij de warme luchtstroom van de autoverwarming, aan sterke trillingen, of waar het in contact komt met veel stof of vuil.
- Gebruik voor het veilig en stevig monteren van het apparaat uitsluitend de bijgeleverde montage-onderdelen.

Maximale montagehoek

Installeer het apparaat nooit onder een hoek van meer dan 45° met het horizontale vlak.

De beschermende rand en de beugel verwijderen 3

Voordat u het apparaat gaat installeren, moet u de beschermende rand ⑤ en de beugel ① verwijderen van het apparaat.

1 **Verwijder de beschermende rand ⑤.**
- ❶ Bevestig de ontgrendelingssleutels ④ op de beschermende rand ⑤.
- ❷ Trek de ontgrendelingssleutels ④ naar u toe om de beschermende rand ⑤ te verwijderen.

2 **Verwijder de beugel ①.**
- ❶ Plaats de ontgrendelingssleutels ④ tussen het apparaat en de beugel ① tot deze vastklikken.
- ❷ Trek de beugel ① omlaag en trek het apparaat omhoog om deze van elkaar te scheiden.

Montagevoorbeeld 4

Montage in het dashboard

Opmerkingen
- *Indien nodig kunt u deze klemhaken ombuigen voor een steviger bevestiging (4-2).*
- *De 4 grepen op de beschermende rand ⑤ moeten goed in de sleuven van het apparaat zijn geplaatst (4-3).*

Het voorpaneel verwijderen en bevestigen 5

Verwijder, alvorens met het installeren te beginnen, het afneembare voorpaneel.

5-A Verwijderen

Vergeet niet, voordat u het voorpaneel verwijdert, eerst op (OFF) te drukken. Druk vervolgens op de ⏏ toets en trek het naar u toe.

5-B Bevestigen

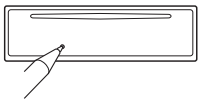
Breng deel Ⓐ van het voorpaneel aan op deel Ⓑ van het apparaat zoals afgebeeld en druk op de linkerzijde tot deze vastklikt.

Waarschuwing als het contactslot van de auto geen ACC-positie heeft

Zorg ervoor dat u de functie voor automatisch uitschakelen instelt. Raadpleeg de bijgeleverde gebruiksaanwijzing voor meer informatie.
Het apparaat wordt na de ingestelde tijd automatisch volledig uitgeschakeld nadat het apparaat is uitgeschakeld. Zo wordt voorkomen dat de accu leegloopt.
Als u de functie voor automatisch uitschakelen niet instelt, moet u (OFF) ingedrukt houden tot het display verdwijnt telkens wanneer u het contact uitschakelt.

RESET-toets

Als u de installatie en aansluitingen hebt voltooid, moet u met een puntig voorwerp, zoals de punt van een balpen, op RESET drukken nadat u het voorpaneel hebt verwijderd.



Меры предосторожности

- Место для установки аппарата выбирайте тщательно, чтобы он не мешал нормальному управлению автомобилем.
- Не устанавливайте аппарат там, где он будет подвержен воздействию пыли, грязи, чрезмерной вибрации или высоких температур, например в местах, попадающих под прямые солнечные лучи или находящихся вблизи вентиляционных решеток обогревателей.
- В целях обеспечения надежной и безопасной установки используйте лишь входящие в комплект монтажные детали.

Допустимый угол установки

Установите аппарат под углом не более 45°.

Снятие защитной манжеты и кронштейна 3

Перед установкой аппарата снимите с него защитную манжету ⑤ и кронштейн ①.

1 **Снятие защитной манжеты ⑤.**
- ❶ Для снятия защитной манжеты ⑤ используйте ключи для демонтажа ④.
- ❷ Потяните на себя ключи для демонтажа ④, чтобы снять защитную манжету ⑤.

2 **Снятие кронштейна ①.**
- ❶ Вставьте одновременно до щелчка оба ключа для демонтажа ④ между аппаратом и кронштейном ①.
- ❷ Потяните кронштейн ① вниз, а аппарат - вверх, чтобы отделить одно от другого.

Пример установки 4

Установка аппарата в приборной панели

Примечания
- *При необходимости отогните эти выступы наружу, чтобы обеспечить плотную подгонку (4-2).*
- *Убедитесь, что 4 фиксатора, имеющиеся на защитной манжете ⑤, надежно вставлены в отверстия на аппарате (4-3).*

Порядок снятия и установки передней панели 5

Перед установкой аппарата снимите с него переднюю панель.

5-A Снятие панели

Прежде чем снимать переднюю панель, обязательно отключите аппарат, нажав клавишу (OFF). Нажмите кнопку ⏏, затем снимите панель, потянув ее на себя.

5-B Установка панели

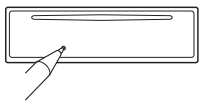
Сначала присоедините часть Ⓐ передней панели к части Ⓑ аппарата, как это показано на иллюстрации, а затем вдвиньте в паз левую часть панели до легкого щелчка.

Предостережение относительно аппаратуры, установленной в автомобиле, в замке зажигания которого нет отдельного положения ACC для отключения подсоединенной аппаратуры

Задайте функцию автоматического выключения. Для получения дополнительной информации см. прилагаемые инструкции по эксплуатации.
После выключения аппарата его питание будет автоматически отключено в установленное время, что предотвращает разрядку аккумулятора.
Если функция автоматического выключения не задана, то при каждом выключении зажигания нажмите и удерживайте кнопку (OFF) до тех пор, пока дисплей не погаснет.

Кнопка RESET

Когда установка и подсоединения будут закончены, обязательно нажмите кнопку RESET с помощью шариковой ручки и т.п., предварительно сняв переднюю панель.



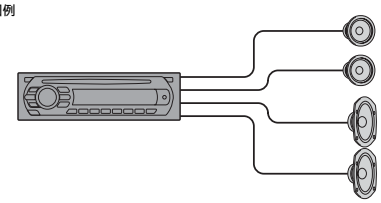
(E model)

Equipment used in illustrations (not supplied)
Equipo utilizado en las ilustraciones (no suministrado)
插图中的装置（非附送）

Front speaker
Altavoz frontal
前扬声器

Rear speaker
Altavoz posterior
后扬声器

Connection example
Ejemplo de conexiones
线路连接图例



Cautions

Be sure to install this unit in the dashboard of the car as the rear side of the unit becomes hot during use.

- This unit is designed for negative ground (earth) 12 V DC operation only.
- Do not get the leads under a screw, or caught in moving parts (e.g. seat railing).
- Before making connections, turn the car ignition off to avoid short circuits.
- Connect the **yellow** and **red** power supply leads only after all other leads have been connected.
- **Run all ground (earth) leads to a common ground (earth) point.**
- Be sure to insulate any loose unconnected leads with electrical tape for safety.

Notes on the power supply lead (yellow)

- When connecting this unit in combination with other stereo components, the connected car circuit's rating must be higher than the sum of each component's fuse.
- When no car circuits are rated high enough, connect the unit directly to the battery.

Connection diagram 2

❶ To a metal surface of the car
First connect the black ground (earth) lead, then connect the yellow and red power supply leads.

❷ To the power antenna (aerial) control lead or power supply lead of antenna (aerial) booster
Notes
- *It is not necessary to connect this lead if there is no power antenna (aerial) or antenna (aerial) booster, or with a manually-operated telescopic antenna (aerial).*
- *When your car has a built-in FM/MW/SW antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❸ To the + 12 V power terminal which is energized in the accessory position of the ignition switch
Notes
- *If there is no accessory position, connect to the + 12 V power (battery) terminal which is energized at all times. Be sure to connect the black ground (earth) lead to a metal surface of the car first.*
- *When your car has a built-in FM/MW/SW antenna (aerial) in the rear/side glass, see "Notes on the control and power supply leads."*

❹ To the + 12 V power terminal which is energized at all times
Be sure to connect the black ground (earth) lead to a metal surface of the car first.

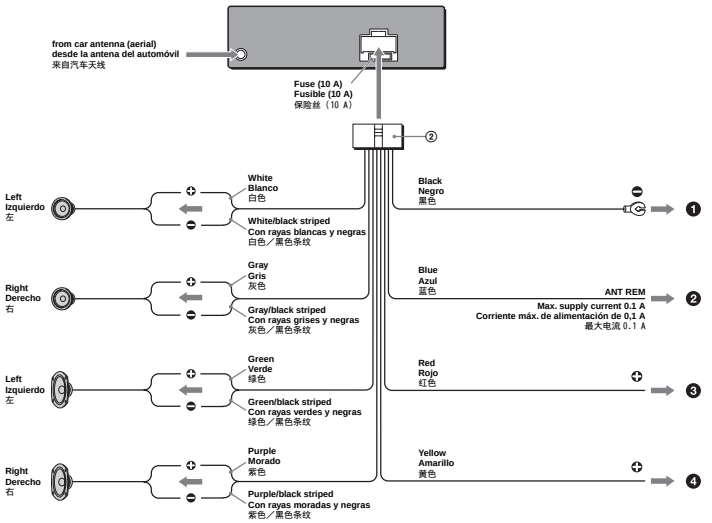
Notes on the control and power supply leads
- *The power antenna (aerial) control lead (blue) supplies + 12 V DC when you turn on the tuner.*
- *When your car has built-in FM/MW/SW antenna (aerial) in the rear/side glass, connect the power antenna (aerial) control lead (blue) or the accessory power supply lead (red) to the power terminal of the existing antenna (aerial) booster. For details, consult your dealer.*
- *A power antenna (aerial) without a relay box cannot be used with this unit.*

Memory hold connection
When the yellow power supply lead is connected, power will always be supplied to the memory circuit even when the ignition switch is turned off.

Notes on speaker connection
- *Before connecting the speakers, turn the unit off.*
- *Use speakers with an impedance of 4 to 8 ohms, and with adequate power handling capacities to avoid its damage.*
- *Do not connect the speaker terminals to the car chassis, or connect the terminals of the right speakers with those of the left speaker.*
- *Do not connect the ground (earth) lead of this unit to the negative (–) terminal of the speaker.*
- *Do not attempt to connect the speakers in parallel.*
- *Connect only passive speakers. Connecting active speakers (with built-in amplifiers) to the speaker terminals may damage the unit.*
- *To avoid a malfunction, do not use the built-in speaker leads installed in your car if the unit shares a common negative (–) lead for the right and left speakers.*
- *Do not connect the unit's speaker leads to each other.*

Note on connection
If speaker is not connected correctly, "FAILURE" appears in the display. In this case, make sure the speaker is connected correctly.

2



Precauciones

Asegúrese de instalar la unidad en el tablero del automóvil, ya que la parte posterior de la unidad se calienta durante el uso.

- Esta unidad ha sido diseñada para alimentarse sólo con cc de 12 V de tierra negativa.
- No coloque los cables debajo de ningún tornillo, ni los aprisione con partes móviles (p. ej. los raíles del asiento).
- Antes de realizar las conexiones, desactive el encendido del automóvil para evitar cortocircuitos.
- Conecte los cables de fuente de alimentación **amarillo** y **rojo** solamente después de haber conectado los demás.
- **Conecte todos los cables de conexión a masa a un punto común.**
- Por razones de seguridad, asegúrese de aislar con cinta aislante los cables sueltos que no estén conectados.

Notas sobre el cable de fuente de alimentación (amarillo)

- Cuando conecte esta unidad en combinación con otros componentes estéreo, la capacidad nominal del circuito conectado del automóvil debe ser superior a la suma del fusible de cada componente.
- Si no hay circuitos del automóvil con capacidad nominal suficientemente alta, conecte la unidad directamente a la batería.

Diagrama de conexión 2

❶ A una superficie metálica del automóvil
Conecte primero el cable de conexión a masa negro, y después los cables amarillo y rojo de fuente de alimentación.

❷ Al cable de control de la antena motorizada o al cable de fuente de alimentación del amplificador de señal de la antena
Notas
- *Si no se dispone de antena motorizada ni de amplificador de señal de la antena, o se utiliza una antena telescópica accionada manualmente, no será necesario conectar este cable.*
- *Si el automóvil incorpora una antena de FM/MW/SW en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❸ Al terminal de alimentación de + 12 V que recibe energía en la posición de accesorio del interruptor de la llave de encendido
Notas
- *Si no hay posición de accesorio, conéctelo al terminal de alimentación (batería) de + 12 V que recibe energía sin interrupción.*
  Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.
- *Si el automóvil incorpora una antena de FM/MW/SW en el cristal trasero o lateral, consulte "Notas sobre los cables de control y de fuente de alimentación".*

❹ Al terminal de alimentación de + 12 V que recibe energía sin interrupción
Asegúrese de conectar primero el cable de conexión a masa negro a una superficie metálica del automóvil.

Notas sobre los cables de control y de fuente de alimentación
- *El cable de control de la antena motorizada (azul) suministrará cc de + 12 V cuando conecte la alimentación del sintonizador.*
- *Si el automóvil dispone de una antena de FM/MW/SW incorporada en el cristal trasero o lateral, conecte el cable de control de antena motorizada (azul) o el cable de fuente de alimentación auxiliar (rojo) al terminal de alimentación del amplificador de señal de la antena existente. Para obtener más información, consulte a su distribuidor.*
- *Con esta unidad no es posible utilizar una antena motorizada sin caja de relé.*

Conexión para protección de la memoria
Si conecta el cable de fuente de alimentación amarillo, el circuito de la memoria recibirá siempre alimentación, aunque apague el interruptor de encendido.

Notas sobre la conexión de los altavoces
- *Antes de conectar los altavoces, desconecte la alimentación de la unidad.*
- *Utilice altavoces con una impedancia de 4 a 8 Ω con la capacidad de potencia adecuada para evitar que se dañen.*
- *No conecte los terminales de altavoz al chasis del automóvil, ni conecte los terminales del altavoz derecho con los del izquierdo.*
- *No conecte el cable de conexión a masa de esta unidad al terminal negativo (–) del altavoz.*
- *No intente conectar los altavoces en paralelo.*
- *Conecte solamente altavoces pasivos. Si conecta altavoces activos (con amplificadores incorporados) a los terminales de altavoz, puede dañar la unidad.*
- *Para evitar fallos de funcionamiento, no utilice los cables de altavoz incorporados instalados en el automóvil si su unidad comparte un cable negativo común (–) para los altavoces derecho e izquierdo.*
- *No conecte los cables de altavoz de la unidad entre sí.*

Nota sobre la conexión
Si el altavoz no está conectado correctamente, aparecerá "FAILURE" en la pantalla. Si es así, compruebe la conexión del altavoz.

注意

由于在使用过程中本机的背面会变热，请务必将本机安装在汽车的仪表板中。

- 本机只能使用负极接地的 12 V 直流电源。
- 勿使导线夹在螺丝下，或缠在移动部件上（如座椅扶手）。
- 连接线路之前，请关闭汽车引擎，以避免短路。
- 只有连接了所有其他导线之后，再连接**黄色**和**红色**电源导线。
- **将所有地线都连接到同一接地点。**
- 为了安全，请务必用绝缘胶带使所有松散未连接的导线绝缘。

关于电源导线（黄色）的注意事项

- 将本机与其它立体声装置组合使用时，所连接的汽车电路容量必须大于各装置保险丝容量的总和。
- 当汽车电路容量不够大时，请将本机直接与蓄电池相连接。

线路连接图 2

❶ 至汽车金属表面
首先连接黑色地线，然后连接黄色和红色电源导线。

❷ 至电动天线控制导线或天线升缩器的电源导线
注
- 如果没有电动天线或天线升缩器，或有手动伸缩式天线，则无需连接此导线。
- 若汽车的后/侧玻璃内有内置 FM/MW/SW 天线，请参阅“关于控制导线和电源导线的注意事项”。

❸ 至 + 12 V 电源端子，该端子在点火开关附件位置通电
注
- 如果没有附件位置，则连接至 + 12 V 电源（蓄电池）端子，该端子随时处于通电状态。
  确保首先将黑色地线连接至汽车金属表面。
- 若汽车的后/侧玻璃内有内置 FM/MW/SW 天线，请参阅“关于控制导线和电源导线的注意事项”。

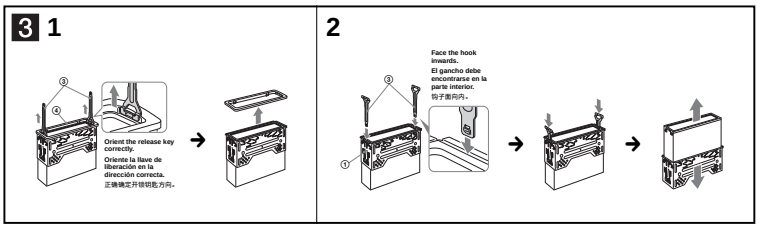
❹ 至 + 12 V 电源端子，该端子随时处于通电状态
确保首先将黑色地线连接至汽车金属表面。

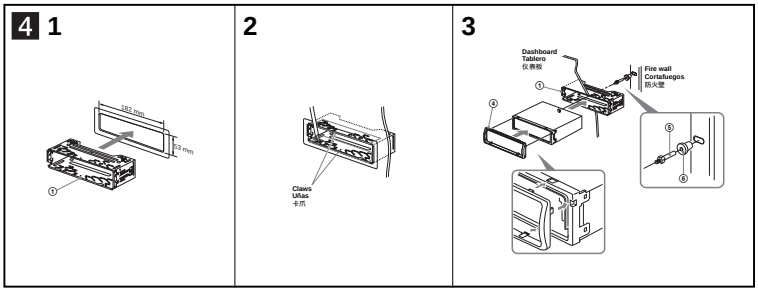
关于控制导线和电源导线的注意事项
- 接通调谐器电源时，电动天线的控制导线（蓝色）便能提供 + 12 V 直流电。
- 当汽车的后/侧玻璃窗上有内置 FM/MW/SW 天线时，请将电动天线控制线（蓝色）或辅助电源导线（红色）连接至现有天线升缩器上的电源端子上。详细说明，请与您的经销商联系。
- 本机不能使用不具备继电器盒的电动天线。

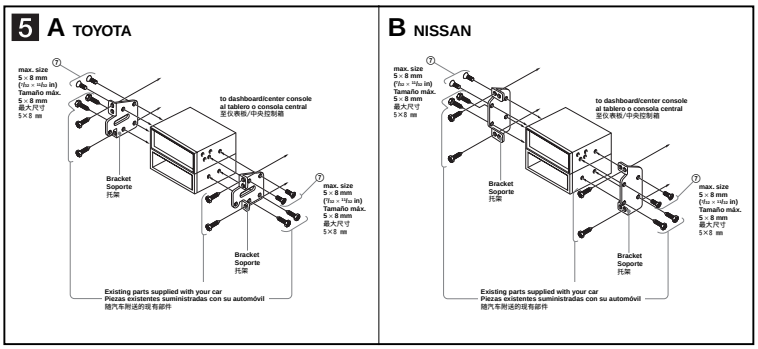
保持记忆的线路连接法
当连接了黄色的电源导线时，即使点火开关关闭，电源仍将对记忆电路供电。

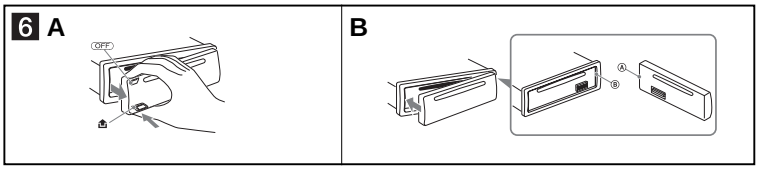
关于扬声器连接的注意事项
- 连接扬声器之前，请关闭本机电源。
- 请使用阻抗为 4–8 欧姆且具有足够功率处理能力的扬声器，以免损坏。
- 勿将扬声器端子连接到汽车底盘上，或将右扬声器的端子与左扬声器的端子连接。
- 勿将本机的地线连接到扬声器的负极（–）端子上。
- 扬声器不可并联连接。
- 请仅连接无源扬声器。将有源扬声器（具有内置放大器）连接到扬声器端子可能会损坏本机。
- 若本机使用左、右扬声器的共用负极（–）导线，为了避免故障，切勿使用安装在汽车内的内置扬声器导线。
- 请勿将本机扬声器导线相互连接。

连接的注意事项
如果未正确连接扬声器，则显示屏上会出现“FAILURE”。这时，请确保扬声器连接正确。









Precautions

- Choose the installation location carefully so that the unit will not interfere with normal driving operations.
- Avoid installing the unit in areas subject to dust, dirt, excessive vibration, or high temperatures, such as in direct sunlight or near heater ducts.
- Use only the supplied mounting hardware for a safe and secure installation.

Mounting angle adjustment

Adjust the mounting angle to less than 45°.

Removing the protection collar and the bracket 3

Before installing the unit, remove the protection collar ④ and the bracket ① from the unit.

1 Remove the protection collar ④.

❶ Engage the release keys ③ together with the protection collar ④.

❷ Pull out the release keys ③ to remove the protection collar ④.

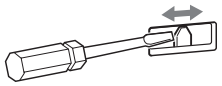
2 Remove the bracket ①.

❶ Insert both release keys ③ together between the unit and the bracket ① until they click.

❷ Pull down the bracket ①, then pull up the unit to separate.

Frequency select switch

The MW (FM) tuning interval is factory-set to the 9 k (50 k) position. If the frequency allocation system of your country is based on 10 kHz (200 kHz) interval, set the switch on the bottom of the unit to the 10 k (200 k) position before making connections.



Note

If the switch was set with power supplied to the unit, disconnect the power connector from the unit, wait for 20 seconds, then reconnect it.

Mounting example 4

Installation in the dashboard

Notes

- *Bend these claws outward for a tight fit, if necessary (4-2).*
- *Make sure that the 4 catches on the protection collar ④ are properly engaged in the slots of the unit (4-3).*

Mounting the unit in a Japanese car 5

You may not be able to install this unit in some makes of Japanese cars. In such a case, consult your Sony dealer.

Note

To prevent malfunction, install only with the supplied screws ⑦.

How to detach and attach the front panel 6

Before installing the unit, detach the front panel.

6-A To detach

Before detaching the front panel, be sure to press (OFF). Press ⏏, and pull it off towards you.

6-B To attach

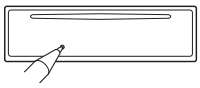
Engage part Ⓐ of the front panel with part Ⓑ of the unit, as illustrated, and push the left side into position until it clicks.

Warning if your car's ignition has no ACC position

Be sure to set the Auto Off function. For details, see the supplied Operating Instructions.
The unit will shut off completely and automatically in the set time after the unit is turned off, which prevents battery drain.
If you do not set the Auto Off function, press and hold (OFF) until the display disappears each time you turn the ignition off.

RESET button

When the installation and connections are completed, be sure to press the RESET button with a ball-point pen, etc., after detaching the front panel.



Precauciones

- Elija cuidadosamente el lugar de montaje de forma que la unidad no interfiera con las funciones normales de conducción.
- Evite instalar la unidad donde pueda quedar sometida a polvo, suciedad, vibraciones excesivas o altas temperaturas como, por ejemplo, a la luz solar directa o cerca de conductos de calefacción.
- Para realizar una instalación segura y firme, utilice solamente la ferretería de montaje suministrada.

Ajuste del ángulo de montaje

Ajuste el ángulo de montaje a menos de 45°.

Extracción del marco de protección y del soporte 3

Antes de instalar la unidad, retire el marco de protección ④ y el soporte ① de la misma.

1 Retire el marco de protección ④.

❶ Una las llaves de liberación ③ al marco de protección ④.

❷ Retire las llaves de liberación ③ para extraer el marco de protección ④.

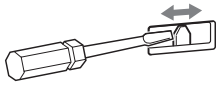
2 Retire el soporte ①.

❶ Inserte ambas llaves de liberación ③ entre la unidad y el soporte ① hasta que encajen.

❷ Presione el soporte ① y, a continuación, levante la unidad para separar ambos elementos.

Selector de frecuencia

El intervalo de sintonía de MW (FM) ha sido ajustado en fábrica a la posición 9 k (50 k). Si el sistema de asignación de frecuencias de su país se basa en el intervalo de 10 kHz (200 kHz), ponga este selector, situado en la base de la unidad, en la posición 10 k (200 k) antes de realizar las conexiones.



Nota

Si se ajustó el selector con el suministro de alimentación conectado a la unidad, desconecte el conector de alimentación de la unidad, espere 20 segundos y, a continuación, vuélvalo a conectar.

Ejemplo de montaje 4

Instalación en el tablero

Notas

- *Si es necesario, doble estas uñas hacia fuera para que encaje firmemente (4-2).*
- *Compruebe que los 4 enganches del marco de protección ④ estén bien fijados en las ranuras de la unidad (4-3).*

Montaje de la unidad en un automóvil japonés 5

Es posible que no pueda instalar esta unidad en algunos automóviles japoneses. En tal caso, consulte a su distribuidor Sony.

Nota

Para evitar que se produzcan fallas, realice la instalación solamente con los tornillos suministrados ⑦.

Forma de extraer e instalar el panel frontal 6

Antes de instalar la unidad, extraiga el panel frontal.

6-A Para extraerlo

Antes de extraer el panel frontal, asegúrese de presionar (OFF). Después presione ⏏ y tire de él hacia usted.

6-B Para instalarlo

Coloque la parte Ⓐ del panel frontal en la parte Ⓑ de la unidad, como se muestra en la ilustración, y después presione la parte izquierda hasta que encaje.

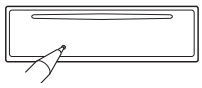
Advertencia: si el encendido del automóvil no dispone de una posición ACC

Asegúrese de ajustar la función de desconexión automática. Para obtener más información, consulte el manual de instrucciones suministrado.

La unidad se apagará completa y automáticamente en el tiempo establecido después de que se desconecte la unidad, lo que evita que se desgaste la batería.
Si no ha ajustado la función de desconexión automática, mantenga presionado (OFF) cada vez que apague el interruptor de encendido, hasta que la pantalla desaparezca.

Botón RESET

Una vez finalizada la instalación y las conexiones, desmonte el panel frontal y presione el botón RESET con un bolígrafo o un objeto similar.



使用前注意事项

- 仔细选取安装位置，以使本装置不干扰正常的驾驶操作。
- 避免将本机安装在受灰尘，污物和强烈振动影响的区域，或安装在高温处，如直射阳光下或热气管道附近。
- 为了安装安全和可靠，只能使用附送的安装构件。

安装角度之调整

请在 45° 以内调整安装角度。

拆卸保护环和装卸支架 3

安装本装置之前，请先从本装置上取下保护环 ④ 和装卸支架 ①。

1 拆卸保护环 ④。

❶ 衔接开锁钥匙 ③ 和保护环 ④。

❷ 拉出开锁钥匙 ③ 以取下保护环 ④。

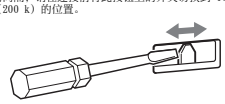
2 拆卸装卸支架 ①。

❶ 将 2 个开锁钥匙 ③ 插入本装置和装卸支架 ① 之间直到听见咯嗒声。

❷ 向下拉装卸支架 ①，然后向上拉出本装置以便分离。

频率选择开关

工厂预设的 MW（FM）调谐间隔为 9 K（50 K）。如果您国家的频率定位系统是基于 10 kHz（200 kHz）的间隔，请在连接前将此按钮上的开关切换到 10 k（200 k）的位置。



注

如果此开关是在本机通电时设定的，则断开本机的电源连接，等待 20 秒，然后再重新连接。

安装示例 4

安装在仪表板里

注

- 如有必要，向外弯曲卡爪以紧固安装（4-2）。
- 请确保保护环 ④ 上的 4 个固定片与本装置的卡槽正确衔接（4-3）。

将本机安装于日本产汽车上 5

有的日本产汽车不能安装本机，在这种情形下，请向 Sony 经销商咨询。

注

为防止发生故障，安装时只能使用附送的螺丝 ⑦。

如何拆卸和装配前面板 6

安装本机之前，请先拆卸前面板。

6-A 拆卸

拆卸前面板前，须按 (OFF)。按 ⏏，然后将前面板向您身体方向拉出。

6-B 装配

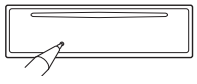
如图所示，将前面板的 Ⓐ 孔搭在本机的 Ⓑ 轴上，然后推入左侧直至听见咯嗒声。

您的汽车引擎没有 ACC 位置时的警告

必须设定自动断电功能。详细说明，请参阅提供的使用说明书。
本机在关机后会在设定的时间内完全并自动切断电源，以防止电池消耗。
如果您未设定自动断电功能，则在每次关闭引擎时按住 (OFF)，直至显示画面消失。

RESET 按钮

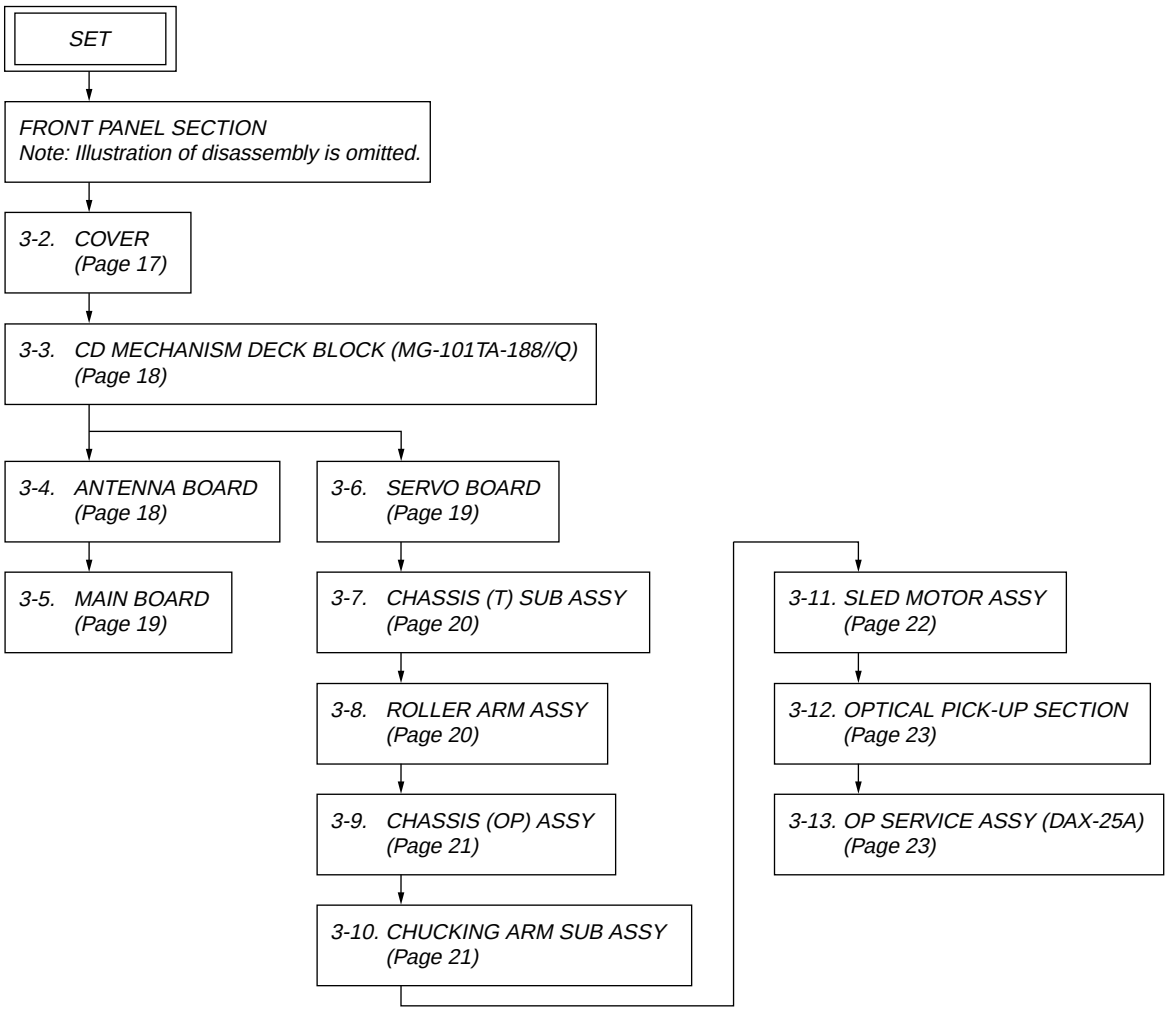
当安装和连接完成，取下前面板后，务请用圆珠笔等按压 RESET 按钮。



SECTION 3
DISASSEMBLY

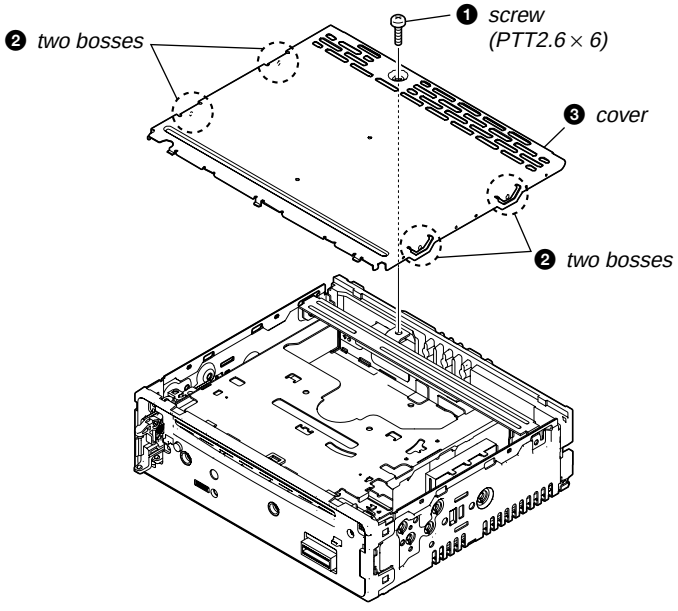
- This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

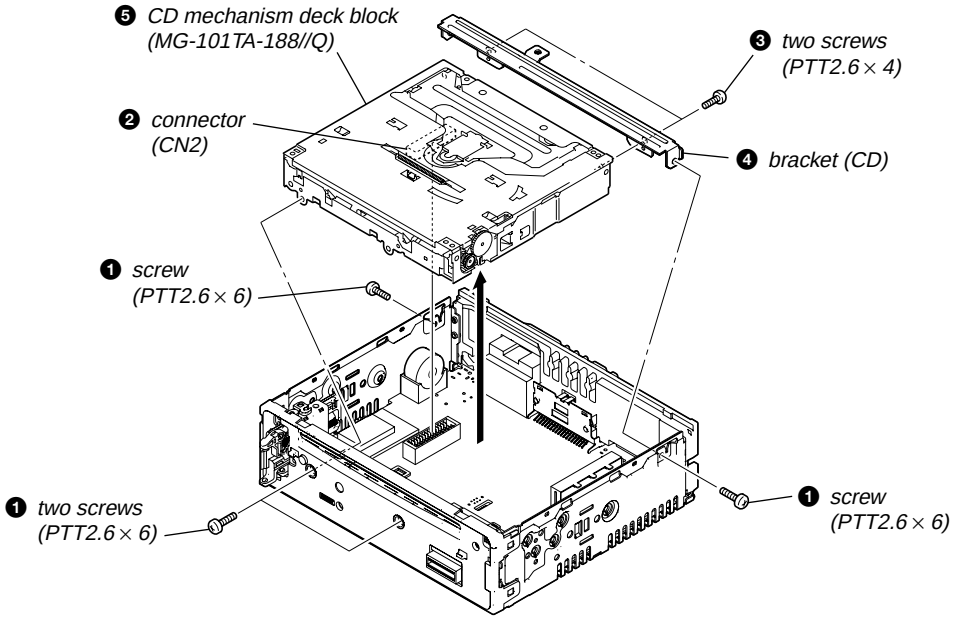

SET
FRONT PANEL SECTION
Note: Illustration of disassembly is omitted.
3-2. COVER (Page 17)
3-3. CD MECHANISM DECK BLOCK (MG-101TA-188//Q) (Page 18)
3-4. ANTENNA BOARD (Page 18)
3-5. MAIN BOARD (Page 19)
3-6. SERVO BOARD (Page 19)
3-7. CHASSIS (T) SUB ASSY (Page 20)
3-8. ROLLER ARM ASSY (Page 20)
3-9. CHASSIS (OP) ASSY (Page 21)
3-10. CHUCKING ARM SUB ASSY (Page 21)
3-11. SLED MOTOR ASSY (Page 22)
3-12. OPTICAL PICK-UP SECTION (Page 23)
3-13. OP SERVICE ASSY (DAX-25A) (Page 23)

Note: Follow the disassembly procedure in the numerical order given.

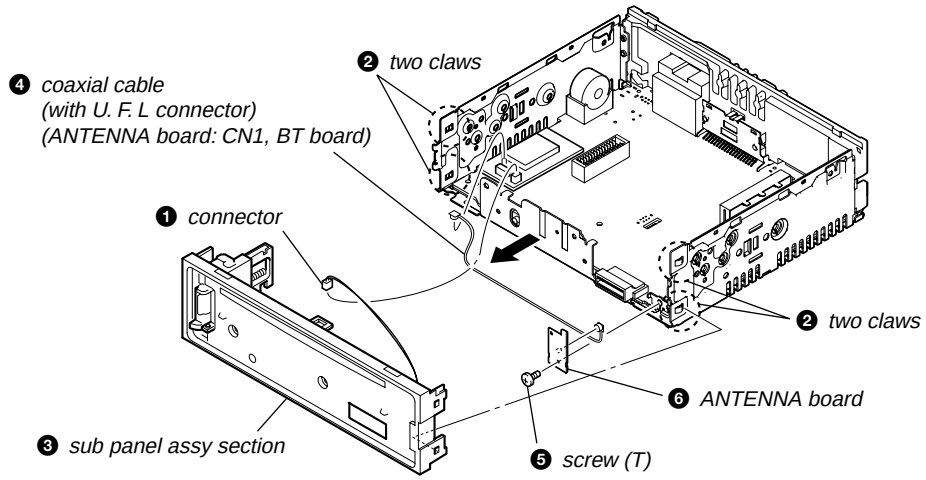
3-2. COVER



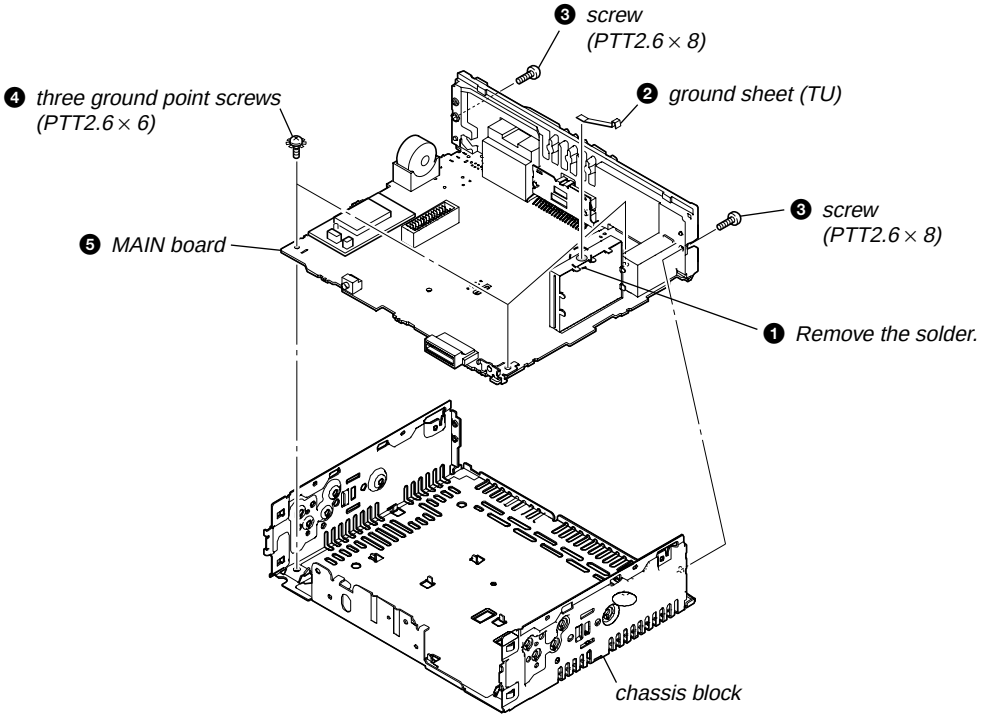
3-3. CD MECHANISM DECK BLOCK (MG-101TA-188//Q)



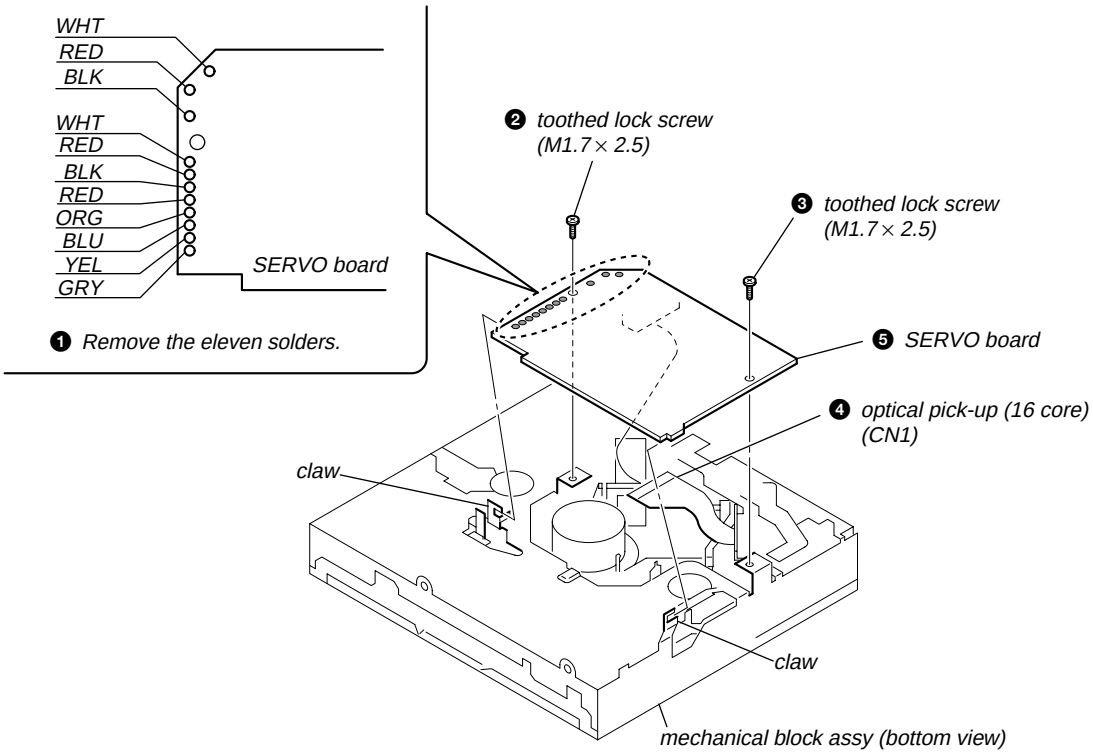
3-4. ANTENNA BOARD



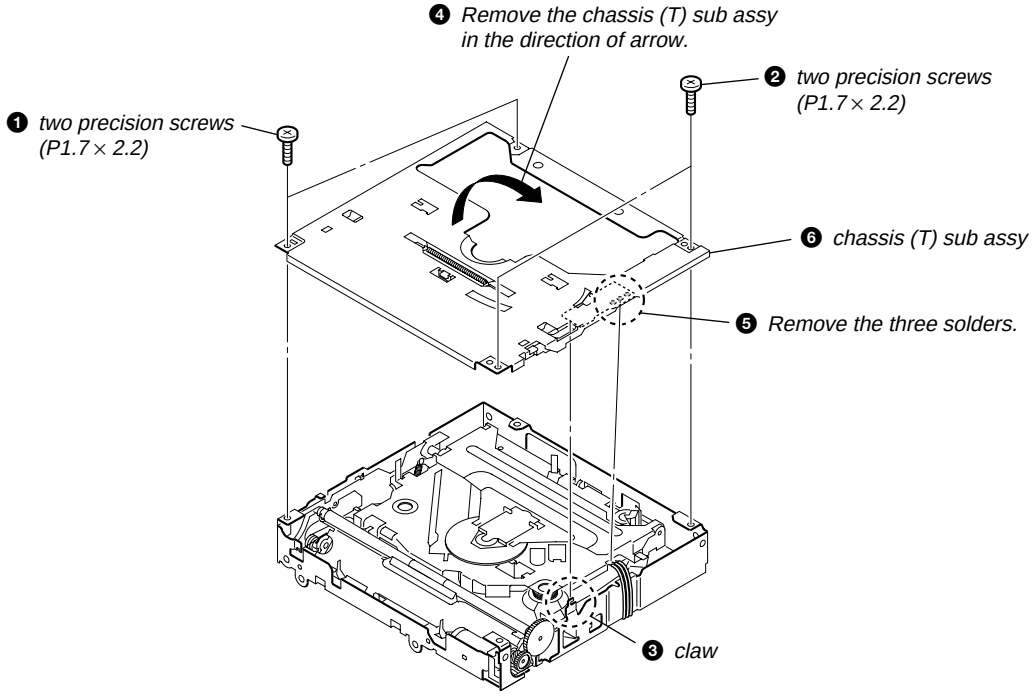
3-5. MAIN BOARD



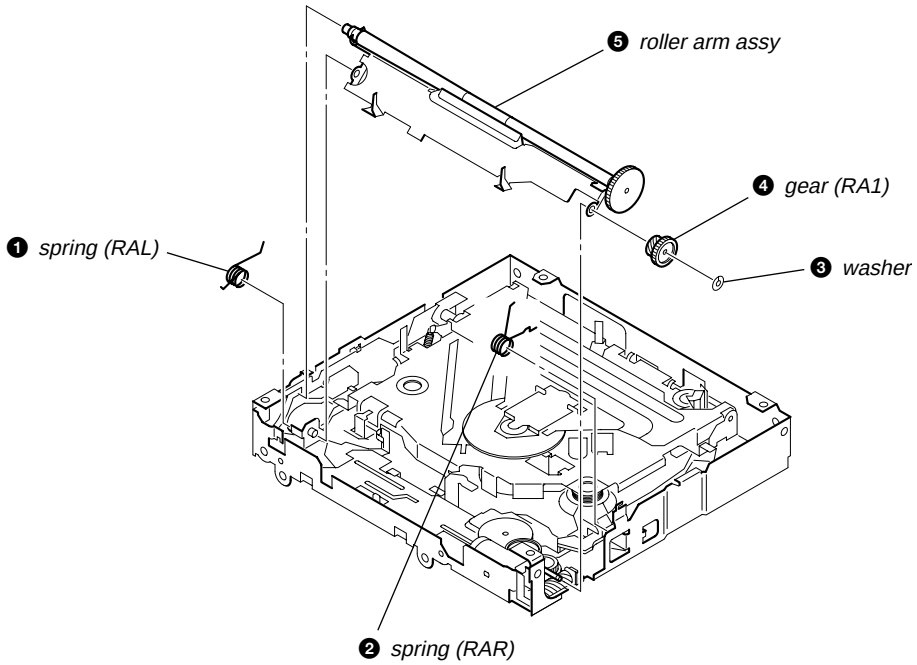
3-6. SERVO BOARD



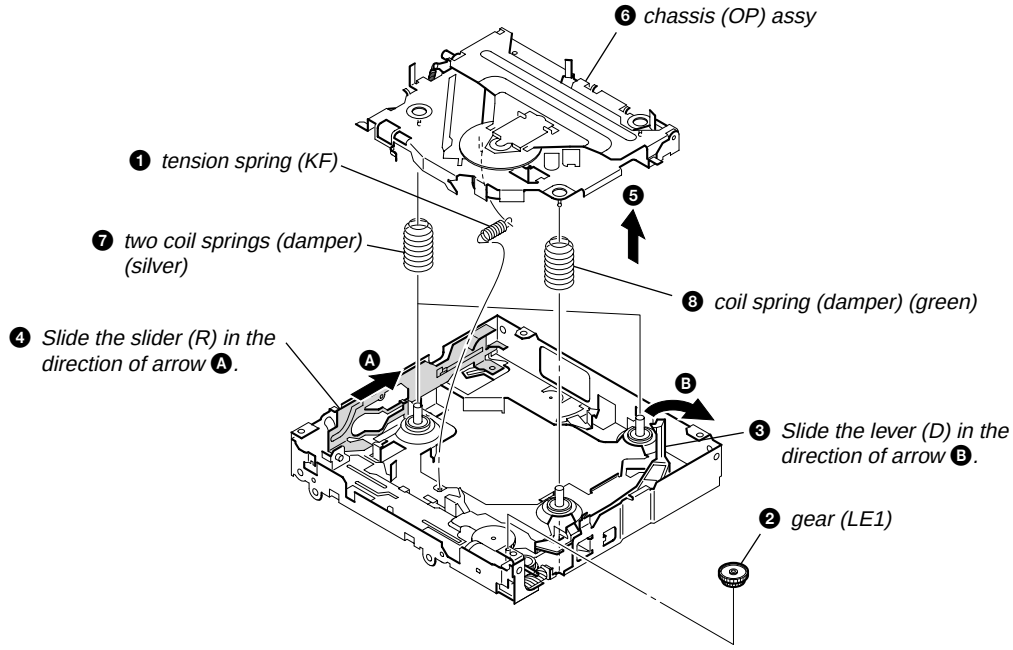
3-7. CHASSIS (T) SUB ASSY


❹ Remove the chassis (T) sub assy in the direction of arrow.
❷ two precision screws (P1.7 × 2.2)
❶ two precision screws (P1.7 × 2.2)
❻ chassis (T) sub assy
❺ Remove the three solders.
❸ claw

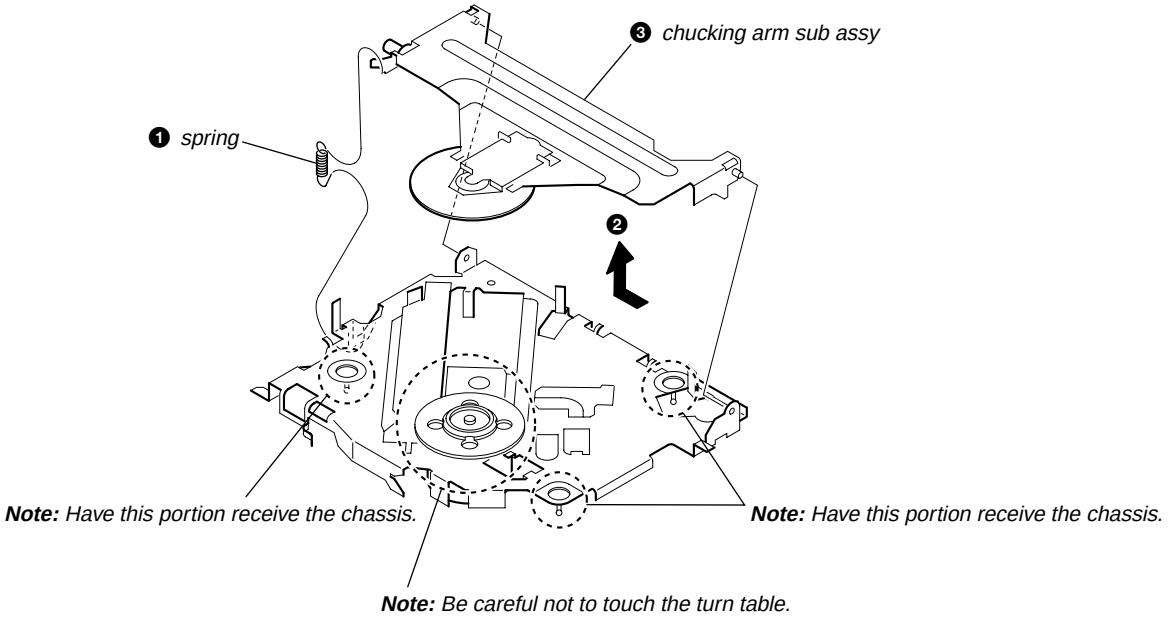
3-8. ROLLER ARM ASSY



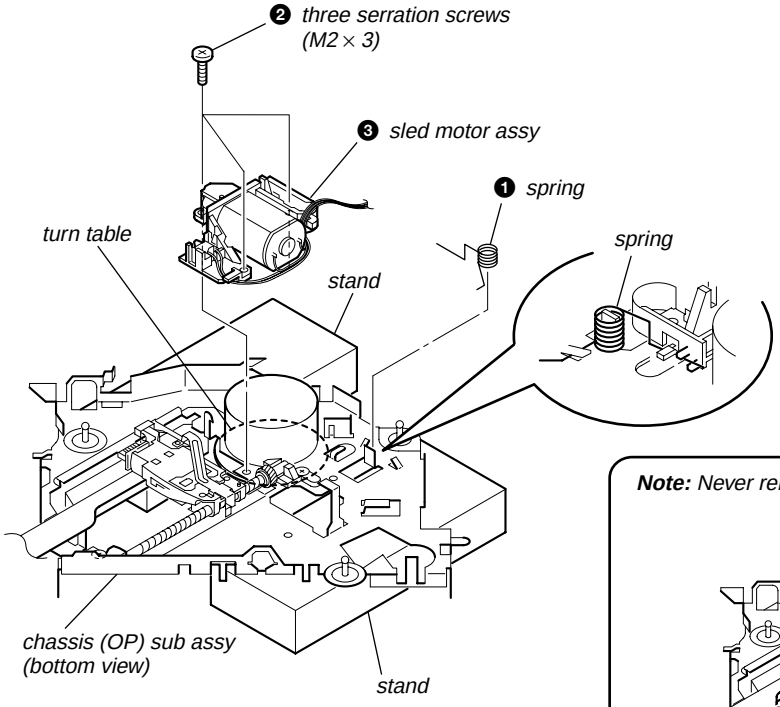
3-9. CHASSIS (OP) ASSY


❻ chassis (OP) assy
❶ tension spring (KF)
❺
❼ two coil springs (damper) (silver)
❽ coil spring (damper) (green)
❹ Slide the slider (R) in the direction of arrow Ⓐ.
Ⓐ
Ⓑ
❸ Slide the lever (D) in the direction of arrow Ⓑ.
❷ gear (LE1)

3-10. CHUCKING ARM SUB ASSY

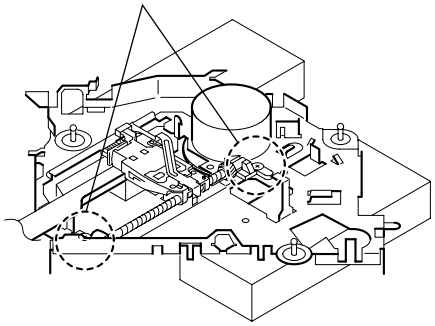

❸ chucking arm sub assy
❶ spring
❷
Note: Have this portion receive the chassis.
Note: Have this portion receive the chassis.
Note: Be careful not to touch the turn table.

3-11. SLED MOTOR ASSY

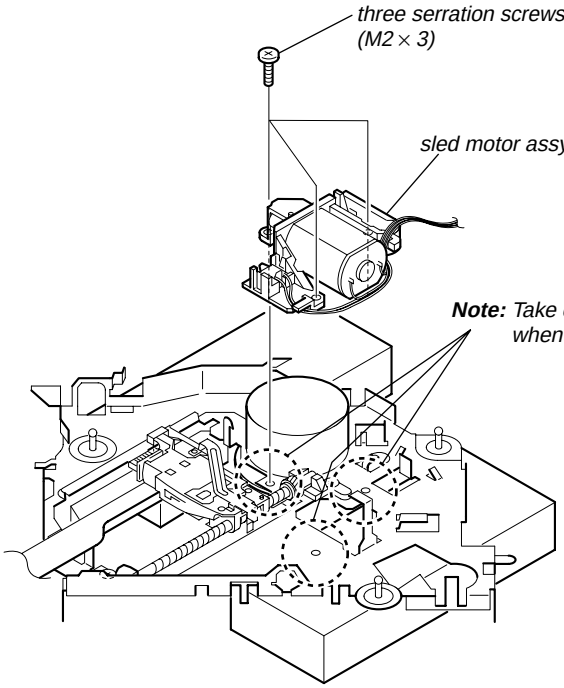


Note: *Place the stand with care not to touch the turn table.*

Note: *Never remove these parts since they were adjusted.*

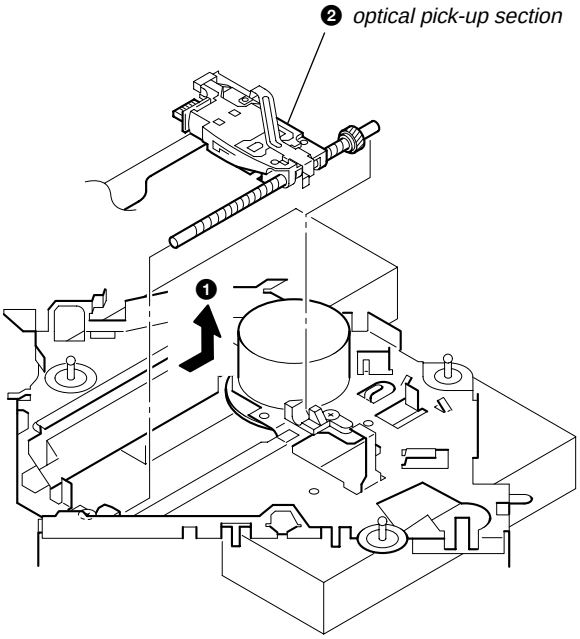


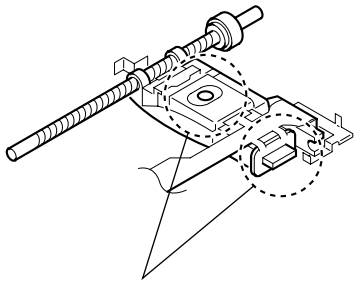
NOTE FOR ASSEMBLY



Note: *Take care to prevent the chassis from being bent when tightening the three machine screws.*

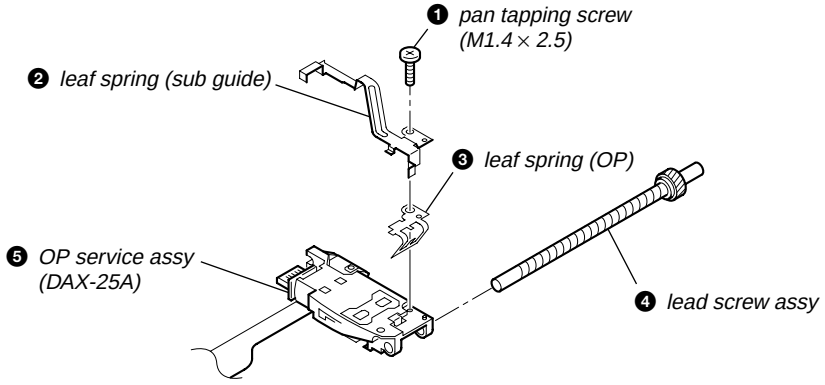
3-12. OPTICAL PICK-UP SECTION





Note: *Be careful not to touch the lens and hologram terminal when removing the optical pick-up section.*

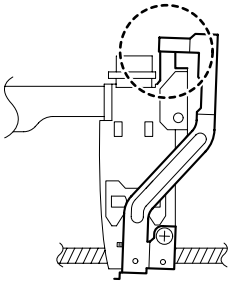
3-13. OP SERVICE ASSY (DAX-25A)



– OP service assy (bottom view) –

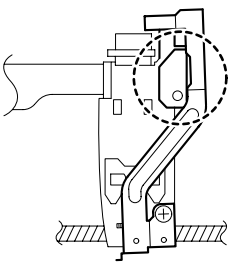
NOTE FOR ASSEMBLY

NG



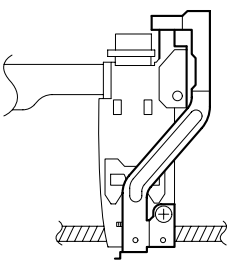
Prevent the end of the leaf spring (sub guide) from being in contact with the OP service assy (DAX-25A).

NG



Prevent the end of the leaf spring (sub guide) from being in contact with the OP service assy (DAX-25A).

OK



There is space at the end of the leaf spring (sub guide) to avoid contact with the slide.

SECTION 4
TEST MODE

Description of the Diagnostics function:

1. Setting the Diag display mode

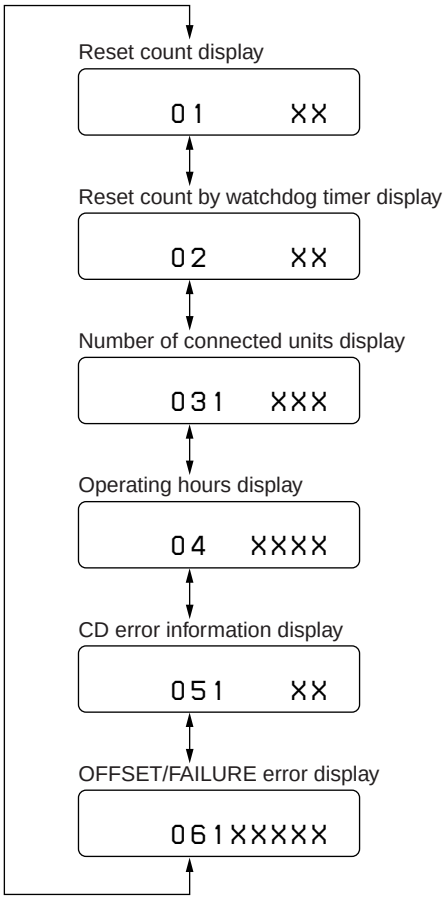
With the power off, press the [4] → [5] → [4] ([4] button needs to be pressed for two seconds) button of set sequentially, and enter the diag function mode.

2. Canceling the Diag display mode

During the Diag function mode, press the [OFF] button.

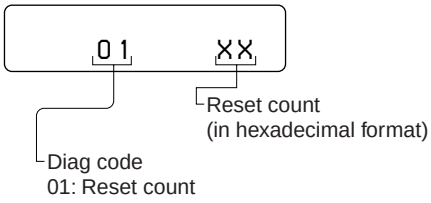
3. Initial display in the Diag display mode.

Just when the Diag mode is entered, "reset count" is displayed. The display mode is switched by each rotation of [SEEK –] or [SEEK+] keys.

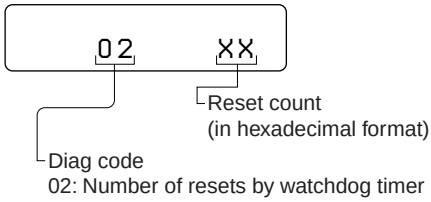


4. Contents of each display mode

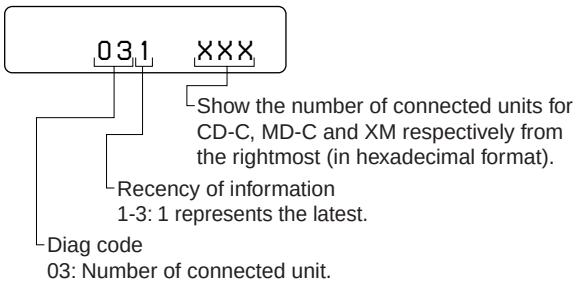
4-1. Reset count display mode



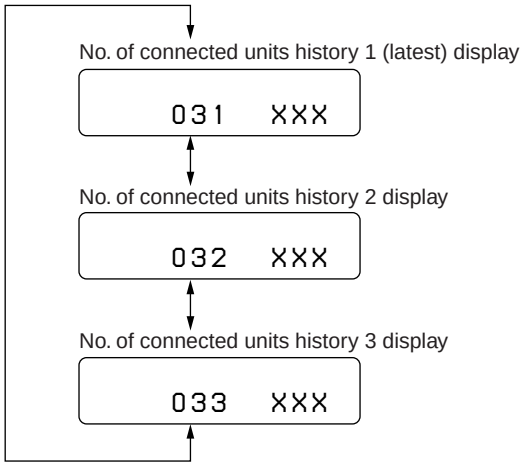
4-2. Reset count by watchdog timer display mode



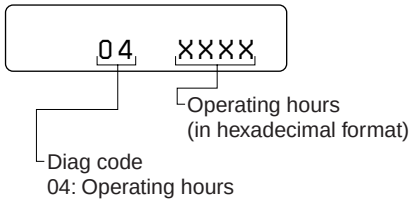
4-3. Number of connected units display mode


031 XXX
Show the number of connected units for CD-C, MD-C and XM respectively from the rightmost (in hexadecimal format).
Recency of information
1-3: 1 represents the latest.
Diag code
03: Number of connected unit.

The display mode is switched by each rotation of [2/ALBM +] or [1/ALBM –] keys during the number of connected units display mode.

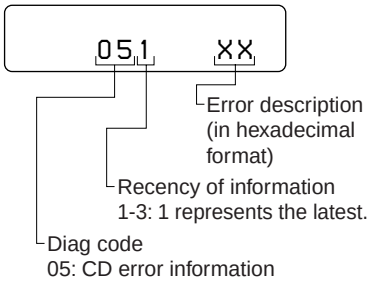

No. of connected units history 1 (latest) display
031 XXX
No. of connected units history 2 display
032 XXX
No. of connected units history 3 display
033 XXX

4-4. Operating hours display mode



4-5. CD error information display mode

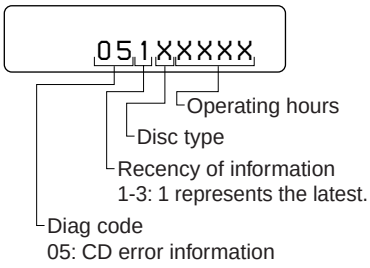
4-5-1. Error description



Error information

Indication	Description
1X	SERVO ERROR
3X	LOADING ERROR
4X	TRACK JUMP
5X	TEXT ERROR
FX	MECHA ERROR

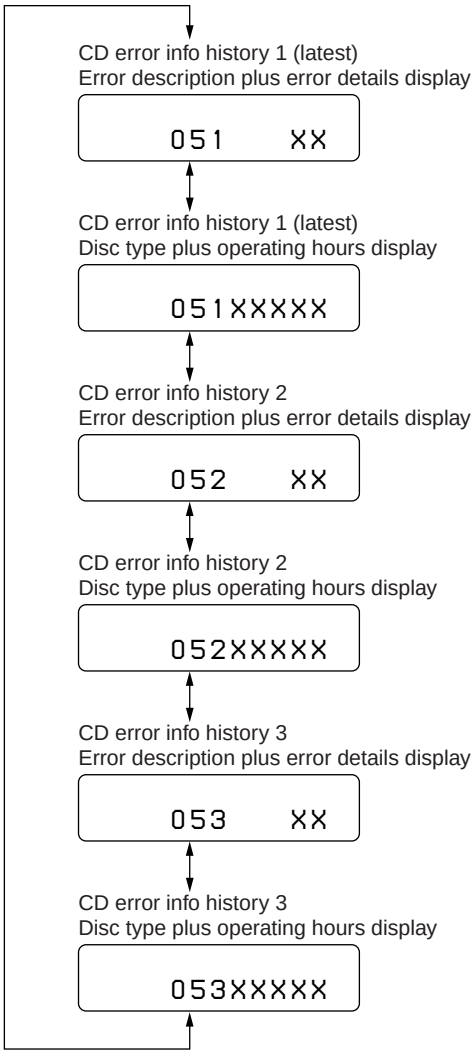
4-5-2. Disc type and operating hours



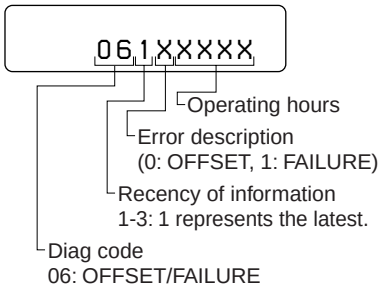
Disc type

Indication	Disc type
0	MP3
1	WMA
2	AAC
3	ATRAC
8	CD/DA
F	UNKNOWN

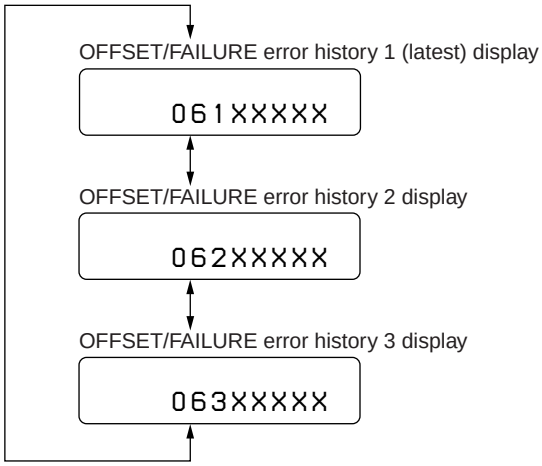
The display mode is switched by each rotation of 2/ALBM + or 1/ALBM – keys during the CD error information display mode.


CD error info history 1 (latest)
Error description plus error details display
051 XX
CD error info history 1 (latest)
Disc type plus operating hours display
051XXXXX
CD error info history 2
Error description plus error details display
052 XX
CD error info history 2
Disc type plus operating hours display
052XXXXX
CD error info history 3
Error description plus error details display
053 XX
CD error info history 3
Disc type plus operating hours display
053XXXXX

4-6. OFFSET/FAILURE error display mode



The display mode is switched by each rotation of 2/ALBM + or 1/ALBM – keys during the OFFSET/FAILURE error display mode.



MEMO

SECTION 5
DIAGRAMS

• Note for Printed Wiring Boards and Schematic Diagrams

Note on Printed Wiring Board:
- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- △ : internal component.
- ▭ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Conductor Side)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Component Side)	Parts on the parts face side seen from the parts face are indicated.

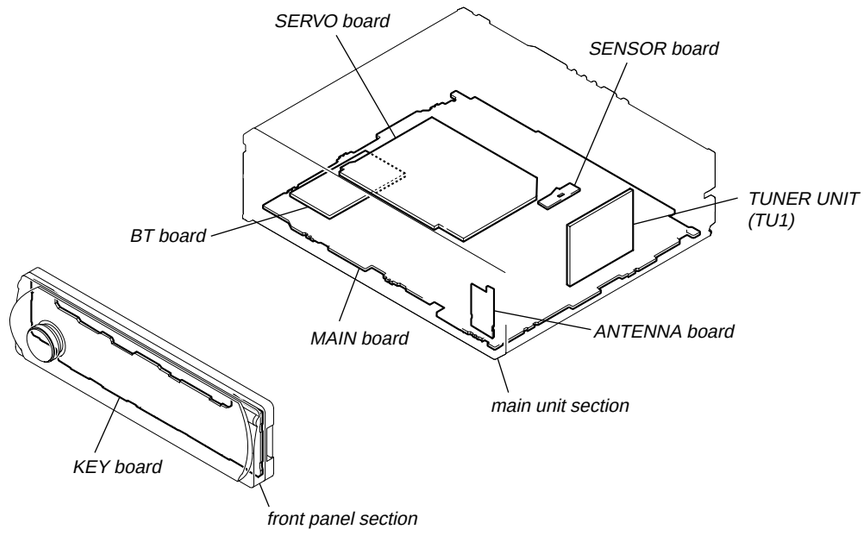
Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

Note on Schematic Diagram:
- All capacitors are in µF unless otherwise noted. (p: pF) 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

- ▬▬ : B+ Line.
- Power voltage is dc 14.4V and fed with regulated dc power supply from ACC and BATT cords.
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER
  ( ) : CD PLAY
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  ⇨ : AUDIO
  ➡ : TUNER
  ⇨ : CD PLAY
  ⇨ : BLUETOOTH OUT
  ➡ : BLUETOOTH IN
  ▷ : MIC
  ⇨ : AUX IN
- Abbreviation
  CND : Canadian model

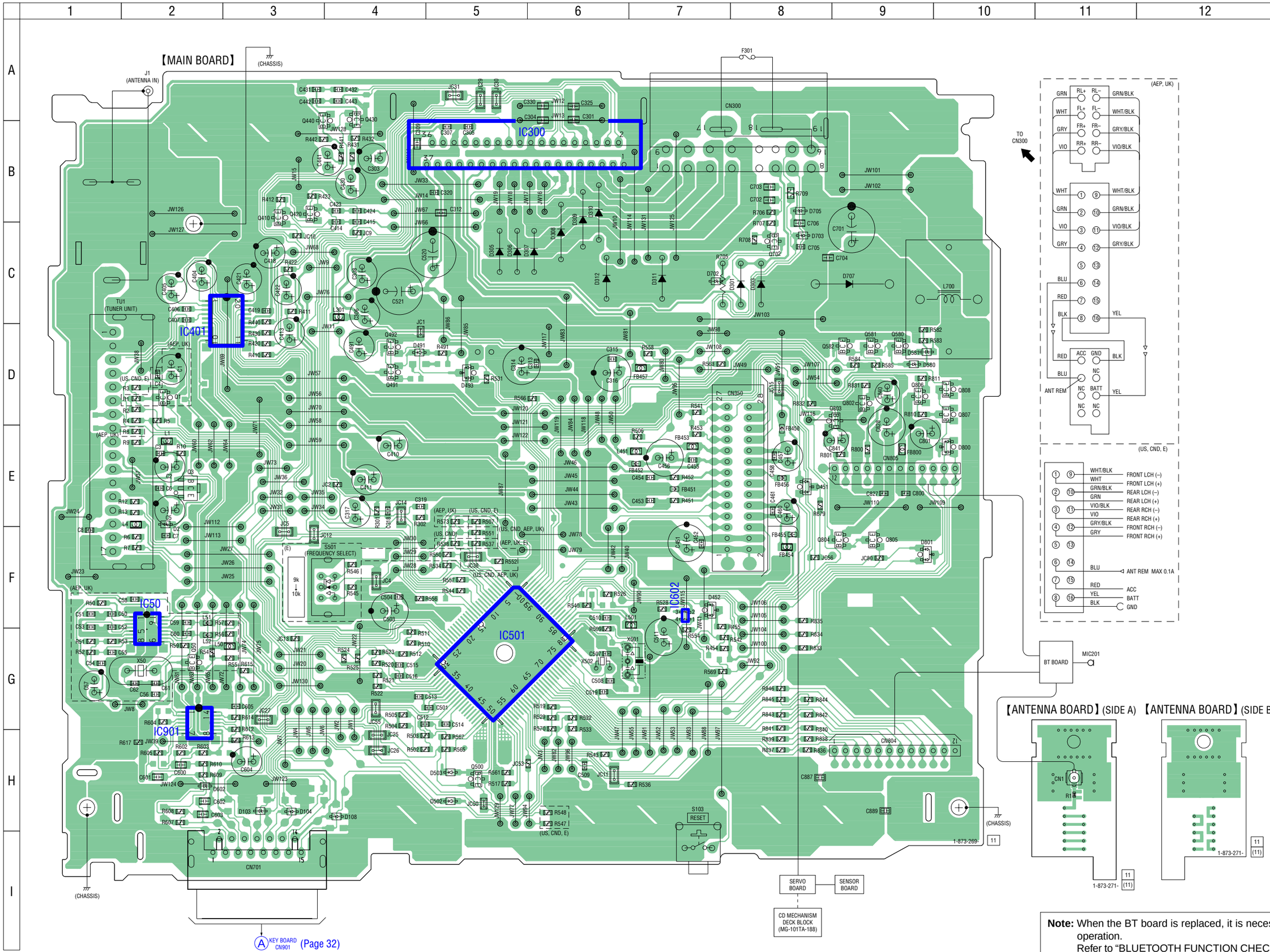
• Circuit Boards Location



5-1. PRINTED WIRING BOARDS – MAIN Section –

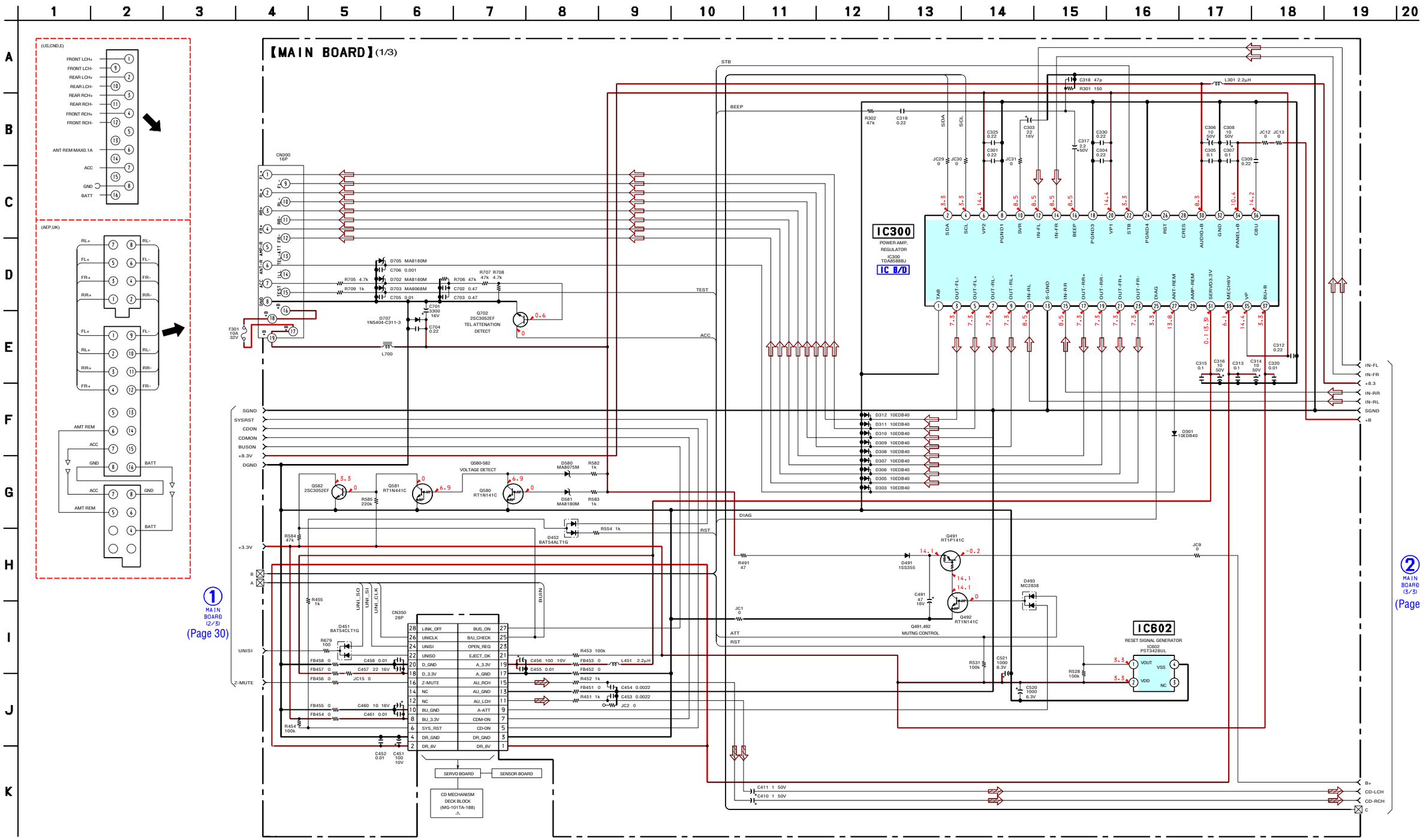
• See page 27 for Circuit Boards Location. • See page 27 for Semiconductor Location.

: Uses unleaded solder.



Note: When the BT board is replaced, it is necessary to confirm operation.
Refer to "BLUETOOTH FUNCTION CHECKING METHOD USING A CELLULAR PHONE" of the servicing note (See page 5).

5-2. SCHEMATIC DIAGRAM – MAIN Section (1/3) – • See page 34 for IC Block Diagrams.

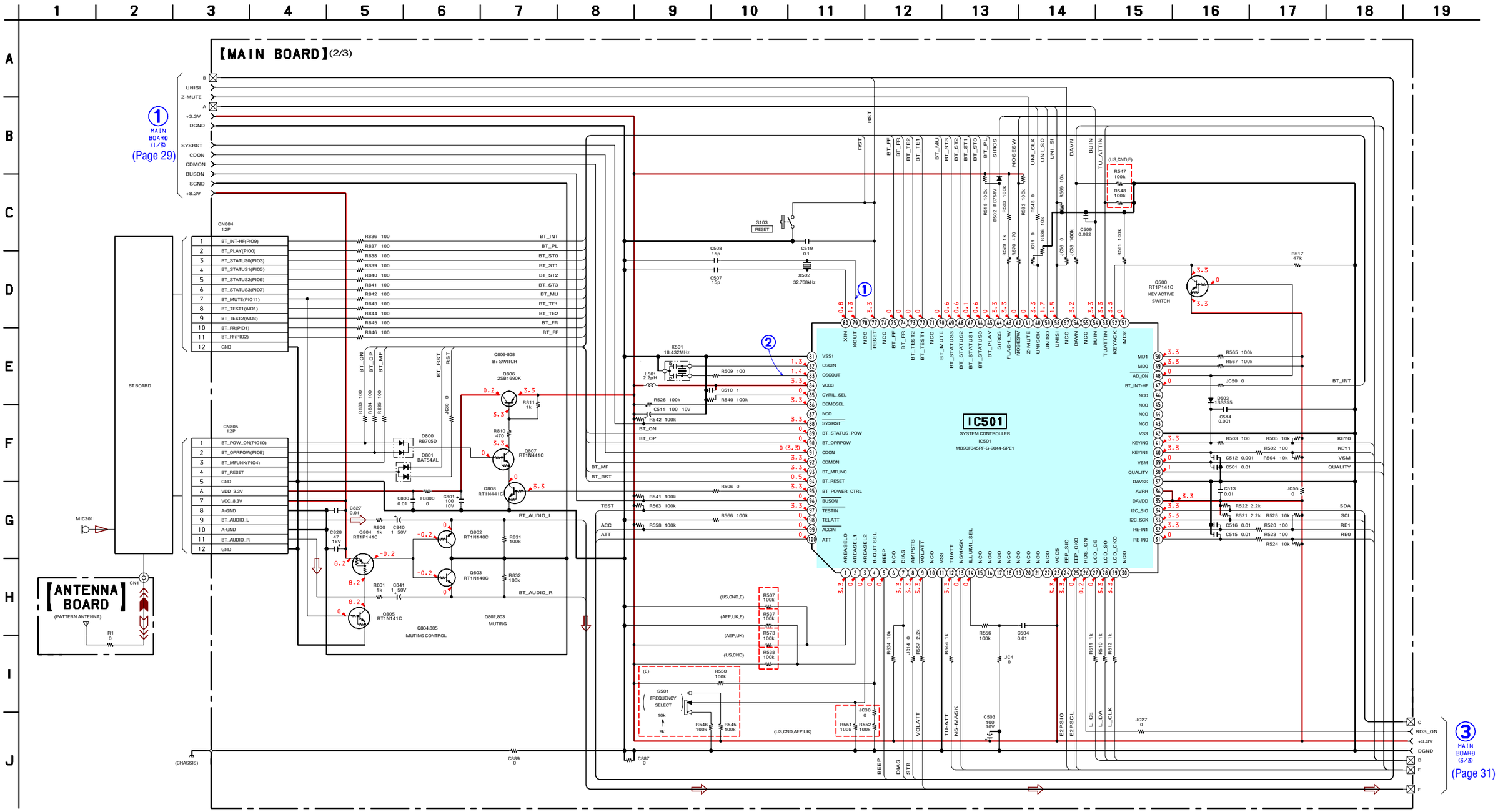


• **Semiconductor Location**

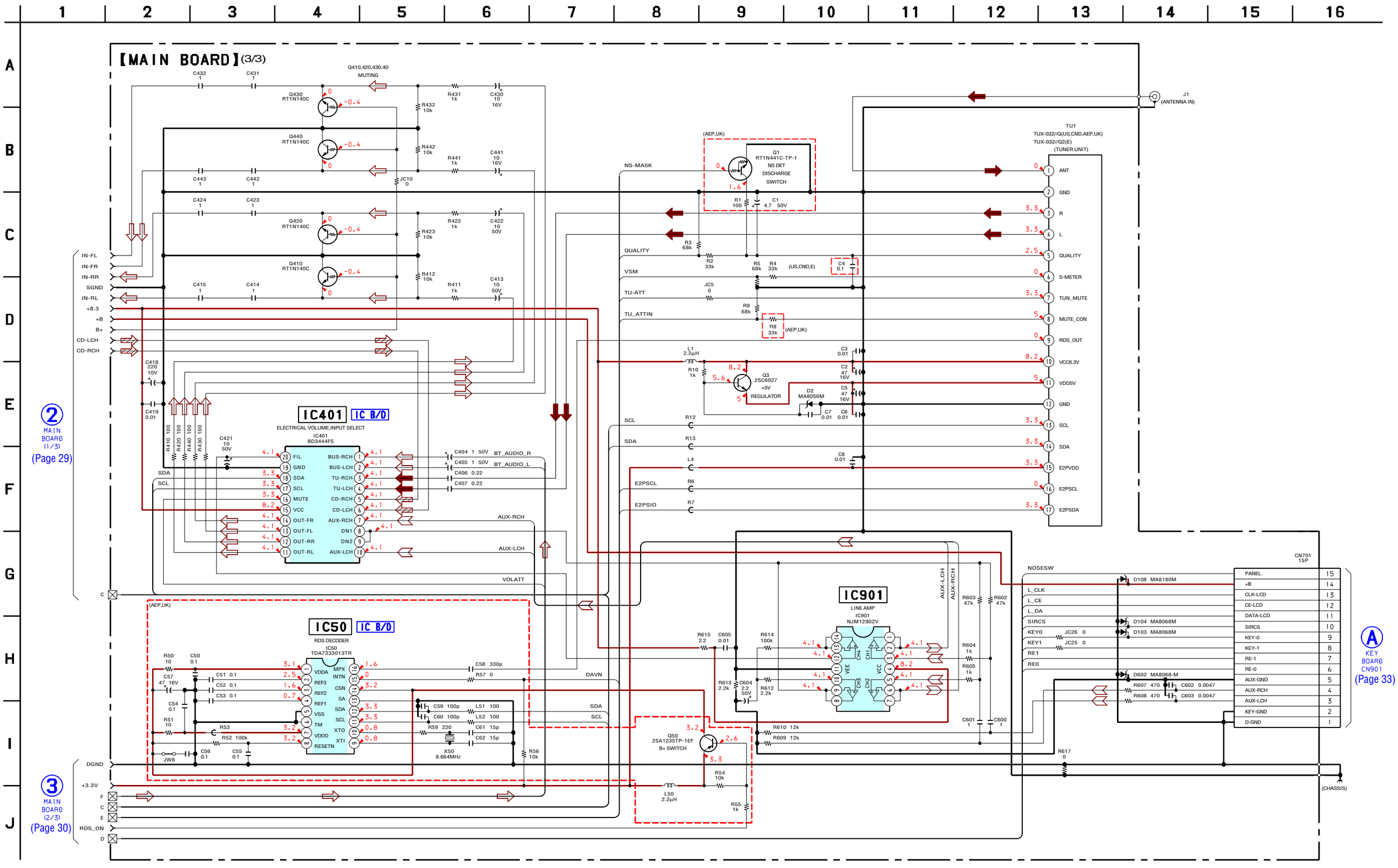
– MAIN Section –

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D2	E-2	D306	C-5	D451	E-8	D581	D-9	D801	F-9	IC901	G-2	Q430	A-4	Q582	D-9	Q807	D-10
D103	H-3	D307	C-6	D452	F-7	D602	H-2					Q440	B-3	Q702	C-8	Q808	D-10
D104	H-3	D308	C-6	D491	D-4	D702	C-7	IC50	F-2	Q1	D-2	Q491	D-4	Q802	D-9		
D108	H-4	D309	B-6	D493	D-5	D703	C-8	IC300	B-6	Q3	E-2	Q492	D-4	Q803	D-9		
D301	C-8	D310	B-6	D502	H-5	D705	B-8	IC401	C-3	Q50	G-2	Q500	H-5	Q804	F-9		
D303	C-8	D311	C-7	D503	H-5	D707	C-9	IC501	G-5	Q410	B-3	Q580	D-9	Q805	F-9		
D305	C-5	D312	C-6	D580	D-9	D800	E-10	IC602	F-7	Q420	B-3	Q581	D-9	Q806	D-9		

5-3. SCHEMATIC DIAGRAM – MAIN Section (2/3) – • See page 34 for Waveforms. • See page 36 for IC Pin Function Description.



5-4. SCHEMATIC DIAGRAM – MAIN Section (3/3) – • See page 34 for IC Block Diagrams.

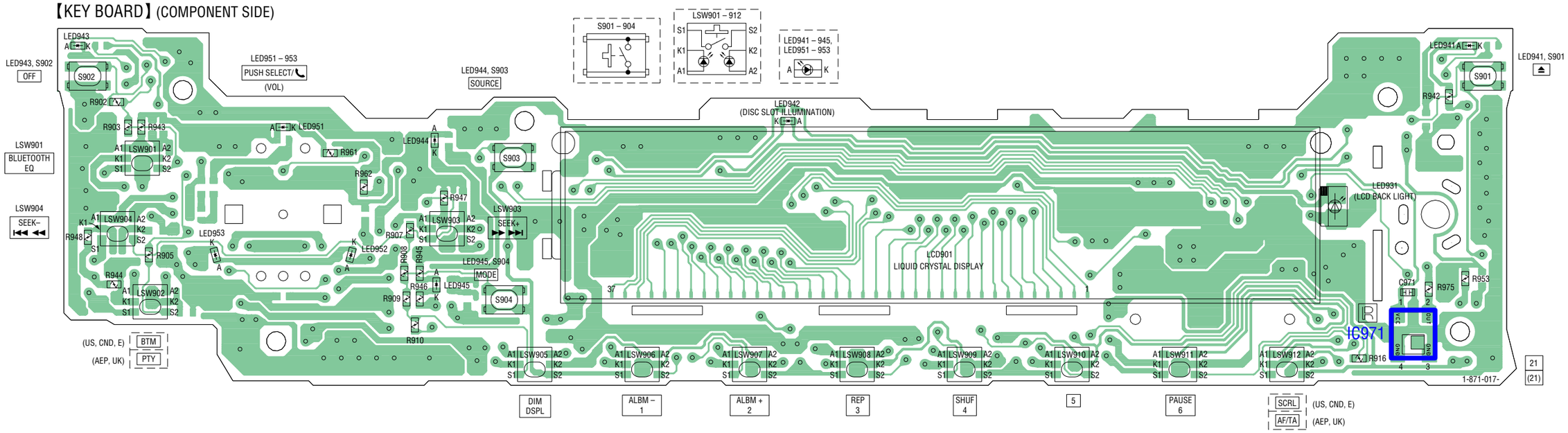


5-5. PRINTED WIRING BOARD – KEY Board –

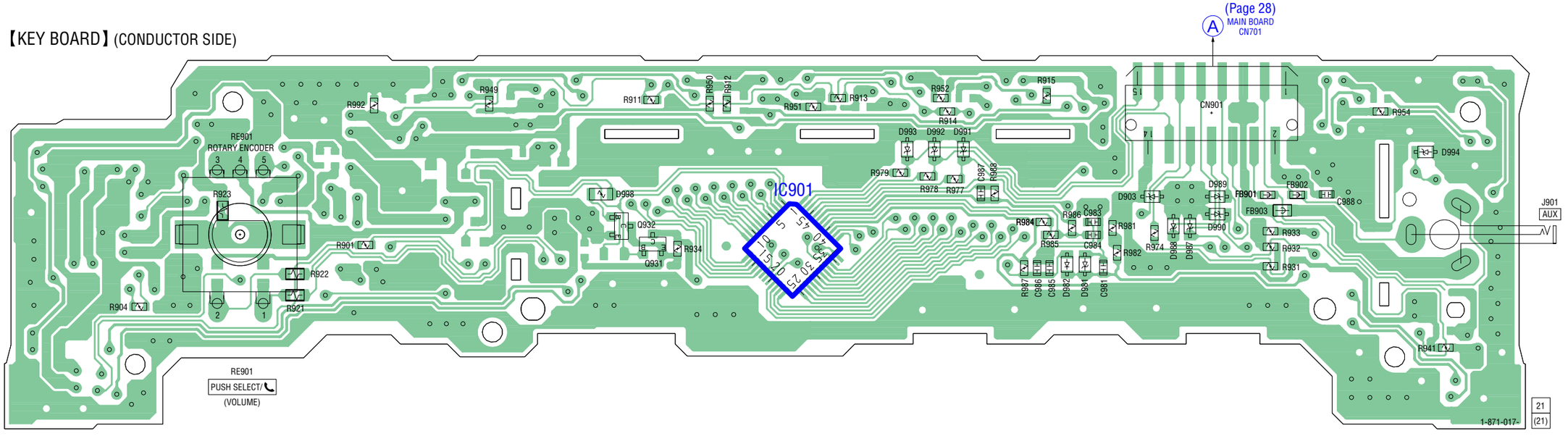
• See page 27 for Circuit Boards Location.

: Uses unleaded solder.

【KEY BOARD】(COMPONENT SIDE)



【KEY BOARD】(CONDUCTOR SIDE)

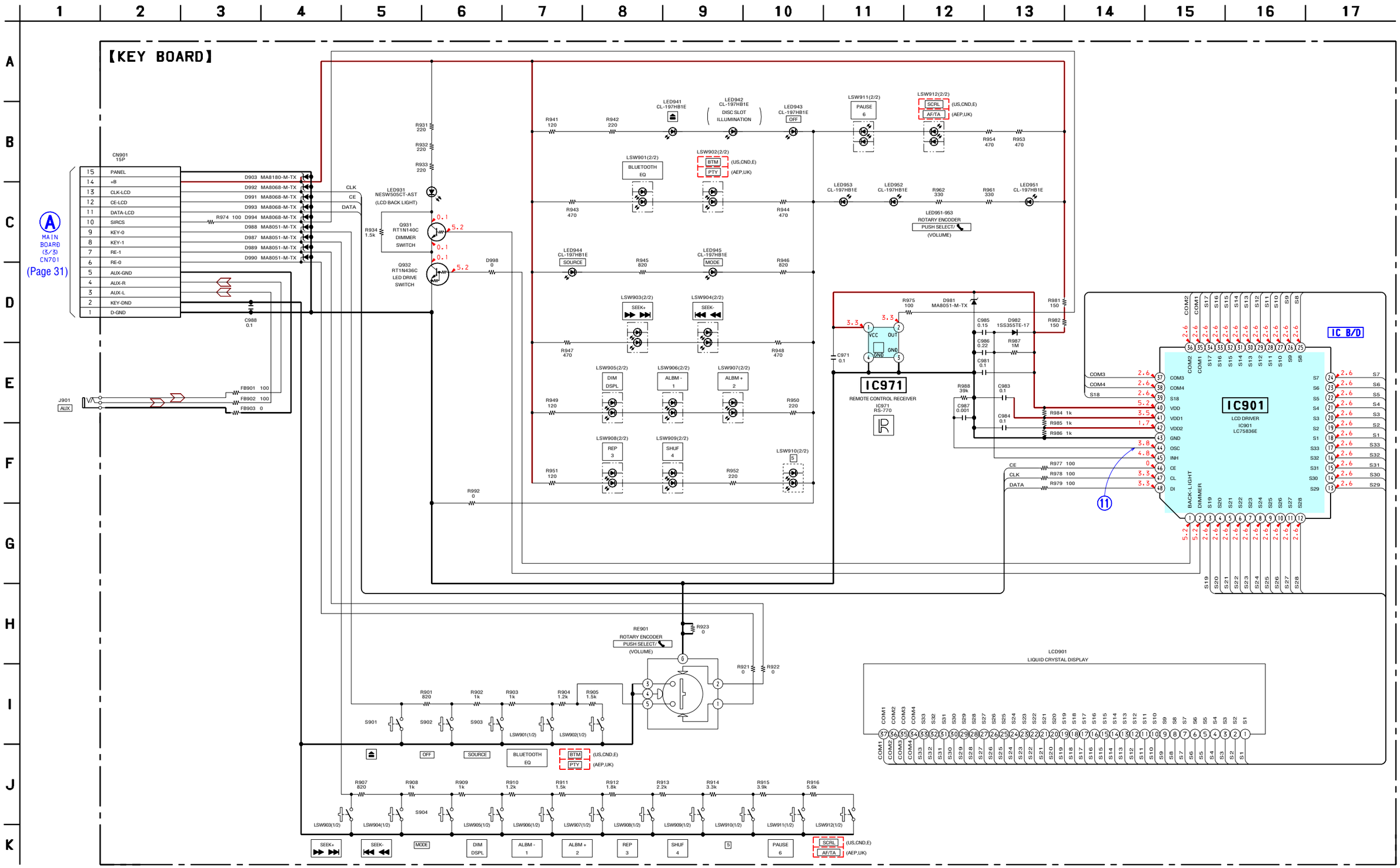


Note: Refer to the Servicing Notes “NOTE FOR REPLACEMENT OF THE AUX JACK (J901)” (page 5), if replacing the Ref. No. J901.

• **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location	Ref. No.	Location	Ref. No.	Location
D903	E-9	D991	E-7	LED931	B-10	LED952	B-3
D981	F-8	D992	E-7	LED941	A-11	LED953	B-2
D982	F-8	D993	E-7	LED942	B-6		
D987	E-9	D994	E-10	LED943	A-1	Q931	E-5
D988	E-9			LED944	B-4	Q932	E-5
D989	E-9	IC901	E-6	LED945	C-4		
D990	E-9	IC971	C-10	LED951	B-3		

5-6. SCHEMATIC DIAGRAM – KEY Board – • See page 34 for Waveforms. • See page 34 for IC Block Diagrams.

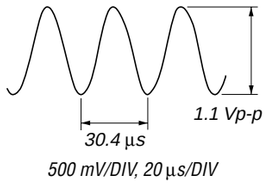


Note: Refer to the Servicing Notes “NOTE FOR REPLACEMENT OF THE AUX JACK (J901)” (page 5), if replacing the Ref. No. J901.

• **Waveforms**

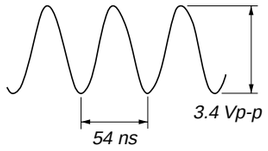
– MAIN Board –

① **IC501 ⑲ (XOUT)**



500 mV/DIV, 20 µs/DIV

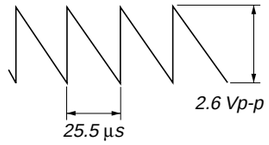
② **IC501 ⑧③ (OSCOUT)**



1 V/DIV, 20 ns/DIV

– KEY Board –

⑪ **IC971 ㊹ (OSC)**

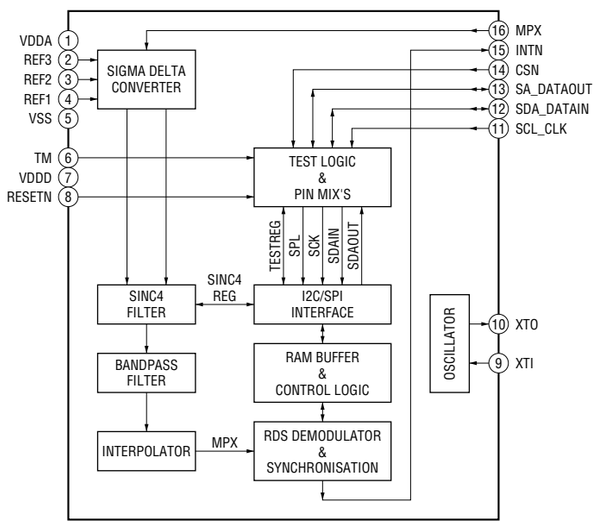


1 V/DIV, 10 µs/DIV

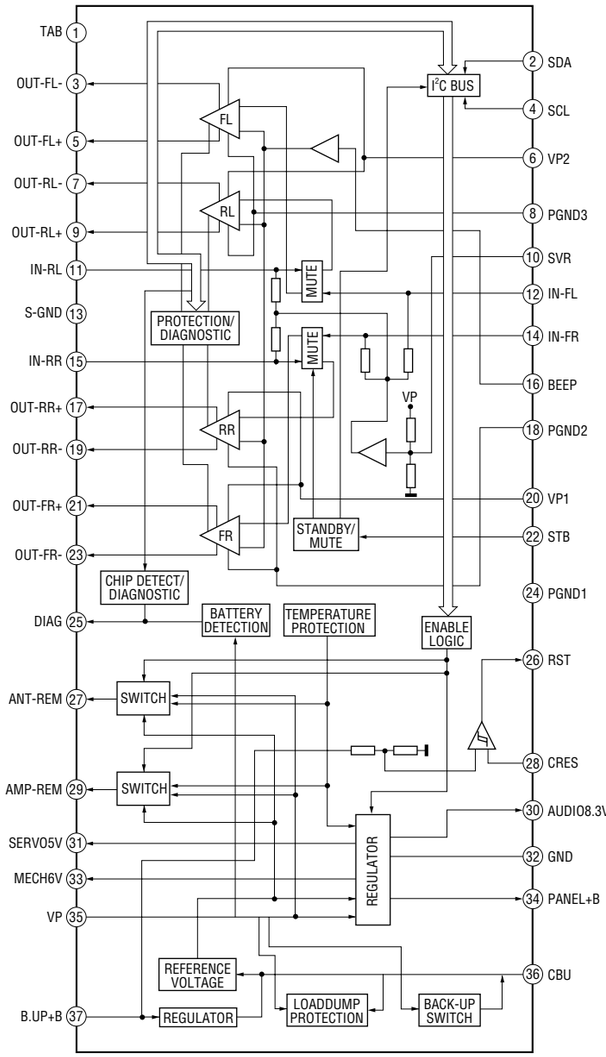
• **IC Block Diagrams**

– MAIN Board –

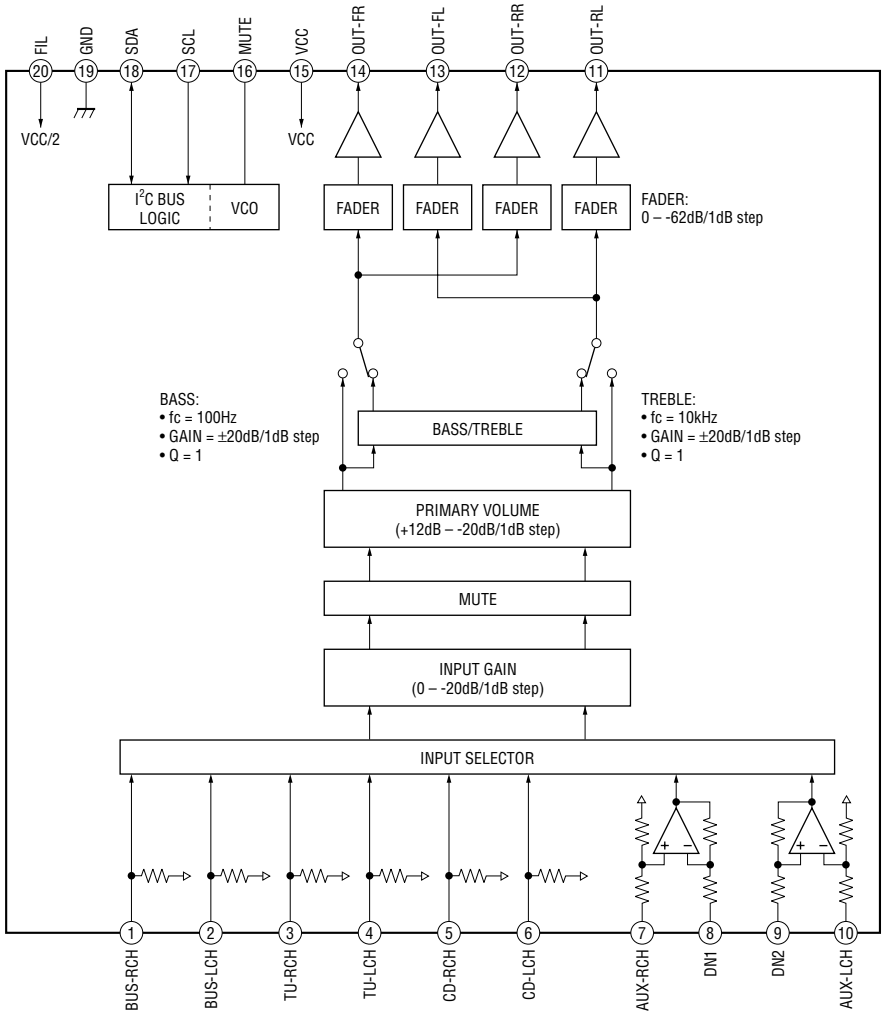
IC50 TDA7333013TR



IC300 TDA8588BJ/N2/R1

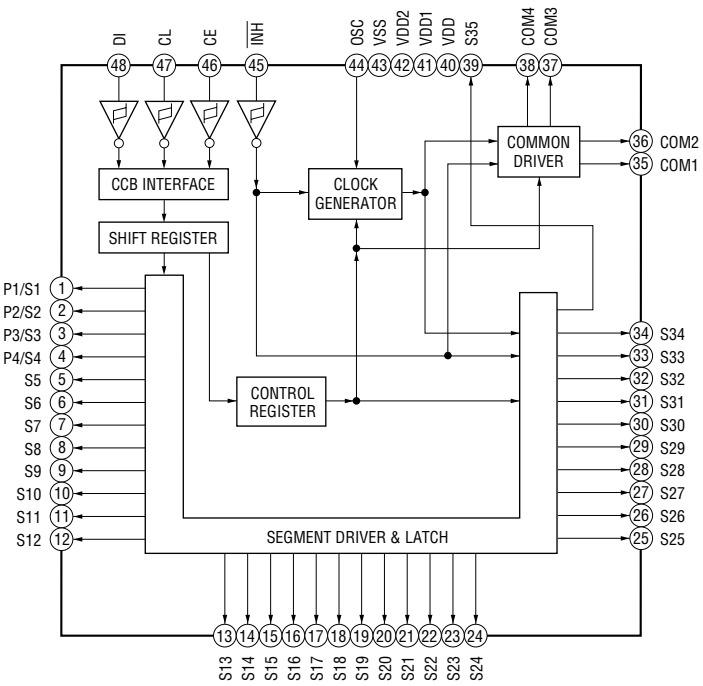


IC401 BD3444FS-E2



– KEY Board –

IC901 LC75836WH-US-E



- **IC Pin Function Description**

MAIN BOARD IC501 MB90F045PF-G-9044-SPE1 (SYSTEM CONTROLLER)

Pin No.	Pin Name	I/O	Description
1 to 3	AREASEL0 to AREASEL2	I	Model destination signal input terminal
4	B-OUT SEL	I	Blackout setting terminal "H": blackout effective
5	BEEP	O	Beep sound drive signal output to the power amplifier
6	NCO	-	Not used
7	DIAG	I	Diagnostic signal input from the power amplifier
8	AMPSTB	O	Standby control signal output to the power amplifier
9	$\overline{\text{VOLATT}}$	O	Muting on/off control signal output to the electrical volume "H": muting on
10	NCO	-	Not used
11	VSS	-	Ground terminal
12	TUATT	O	Tuner muting on/off control signal output terminal
13	NSMASK	O	Discharge control signal output for the noise detection circuit "H": discharge (AEP, UK models only)
14	ILLUMI_SEL	I	Illumination voltage setting terminal "L": 10.4V, "H": 12.5V Fixed at "L" in this set
15 to 22	NCO	-	Not used
23	VCC5	-	Power supply terminal (+3.3V)
24	EEP_SIO	I/O	Two-way data bus with the tuner unit
25	EEP_CKO	O	Serial data transfer clock signal output to the tuner unit
26	RDS_ON	O	Power on/off control signal output terminal for the RDS section (AEP, UK models only)
27	LCD_CE	O	Chip enable signal output to the liquid crystal display driver
28	LCD_SO	O	Serial data output to the liquid crystal display driver
29	LCD_CKO	O	Serial data transfer clock signal output to the liquid crystal display driver
30	NCO	-	Not used
31, 32	RE-IN0, RE-IN1	I	Jog dial pulse input from the rotary encoder
33	I2C_SCK	O	IIC data transfer clock signal output terminal
34	I2C_SIO	I/O	IIC two-way data bus
35	DAVDD	-	Power supply terminal (+3.3V)
36	AVRH	I	Reference voltage (+3.3V) input terminal (for A/D conversion)
37	DAVSS	-	Ground terminal
38	QUALITY	I	Noise level detection signal input at SEEK mode
39	VSM	I	FM and AM signal-meter voltage detection signal input from the tuner unit (A/D input)
40, 41	KEYIN1, KEYIN0	I	Front panel key input terminal (A/D input)
42	VSS	-	Ground terminal
43 to 46	NCO	-	Not used
47	BT_INT-HF	I	HF operation notification signal input from the bluetooth section "H": active
48	$\overline{\text{AD\_ON}}$	O	A/D converter power control signal output When the KEYACK (pin 52) that controls reference voltage power for key A/D conversion input is active, "L" is output from this terminal to enable the input
49 to 51	MD0 to MD2	I	Setting terminal for the CPU operational mode
52	KEY ACK	I	Acknowledge signal (wake up signal) input terminal for the key entry Acknowledge signal is input to accept any function key in the standby status On at input of "H"
53	TUATTIN	I	Attenuate request signal input from the tuner unit
54	BUIN	I	Back up power supply detection signal input terminal "L" is input at low voltage
55	NCO	-	Not used
56	DAVN	I	Synchronize detection signal input of RDS data block (AEP, UK models only)
57	NCO	-	Not used

Pin No.	Pin Name	I/O	Description
58	UNISI	I	Serial data input from the CD section
59	UNISO	O	Serial data output to the CD section
60	UNISCK	O	Serial data transfer clock signal output to the CD section
61	Z-MUTE	I	Muting on/off control signal input from the CD section
62	$\overline{\text{NOSESW}}$	I	Front panel remove/attach detection signal input terminal "L": front panel is attached
63	FLASH_W	I	Flash writing mode detection signal input terminal "L": flash writing mode
64	SIRCS	I	Remote control signal input from the remote control receiver
65	BT_PLAY	O	Key signal output to the bluetooth section
66 to 69	BT_STATUS0 to BT_STATUS3	I	Status input from the bluetooth section
70	BT_MUTE	I	Muting on/off control signal input from the bluetooth section
71	NCO	-	Not used
72	BT_TEST1	O	Test mode setting terminal for the bluetooth test mode 1
73	BT_TEST2	O	Test mode setting terminal for the bluetooth test mode 2
74	BT_FR	O	Key signal output to the bluetooth section
75	BT_FF	O	Key signal output to the bluetooth section
76	NCO	-	Not used
77	$\overline{\text{RESET}}$	I	System reset signal input from the reset signal generator and reset switch "L": reset
78	NCO	-	Not used
79	XOUT	O	Sub system clock output terminal (32.768 kHz)
80	XIN	I	Sub system clock input terminal (32.768 kHz)
81	VSS1	-	Ground terminal
82	OSCIN	I	Main system clock input terminal (18.432 MHz)
83	OSCOUT	O	Main system clock output terminal (18.432 MHz)
84	VCC3	-	Power supply terminal (+3.3V)
85	CYRIL_SEL	I	Cyrillic letter response setting terminal "H": corresponds to cyrillic letter
86	DEMOSEL	I	Demo play setting terminal "H": demo play on
87	NCO	-	Not used
88	$\overline{\text{SYSRST}}$	O	Reset signal output to the CD section
89	BT_STATUS_POW	I	Power supply status input from the bluetooth section "H": bluetooth power on
90	BT_OPRPOW	O	Key signal output to the bluetooth section
91	CDON	I	CD servo power supply control request input terminal
92	CDMON	I	CD mecha power supply control request input terminal
93	BT_MFUNC	O	Key signal output to the bluetooth section
94	BT_RESET	O	Reset signal output to the bluetooth section "L": reset
95	BT_POWER_CTRL	O	Power on/off control signal output terminal for the bluetooth section
96	$\overline{\text{BUSON}}$	O	SONY bus on/off control signal output terminal "L": bus on
97	$\overline{\text{TESTIN}}$	I	Test mode setting terminal "H": test mode
98	TELATT	I	Telephone muting detection signal input terminal At input of "H", the audio signal is attenuated by 20 dB
99	$\overline{\text{ACCIN}}$	I	Accessory power detection signal input terminal "L": accessory power on
100	ATT	O	Muting on/off control signal output terminal

SECTION 6
EXPLODED VIEWS

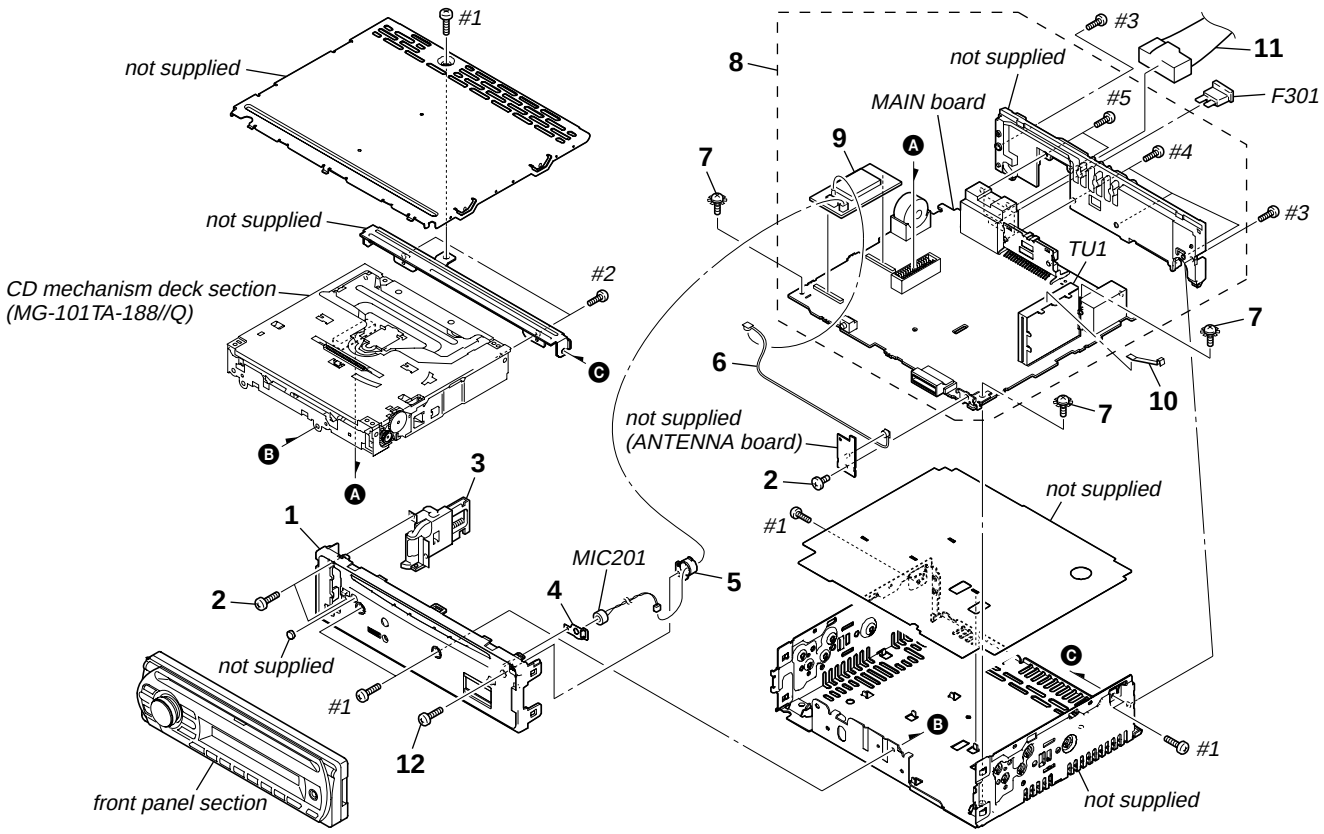
NOTE:

- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories are given in the last of the electrical parts list.
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

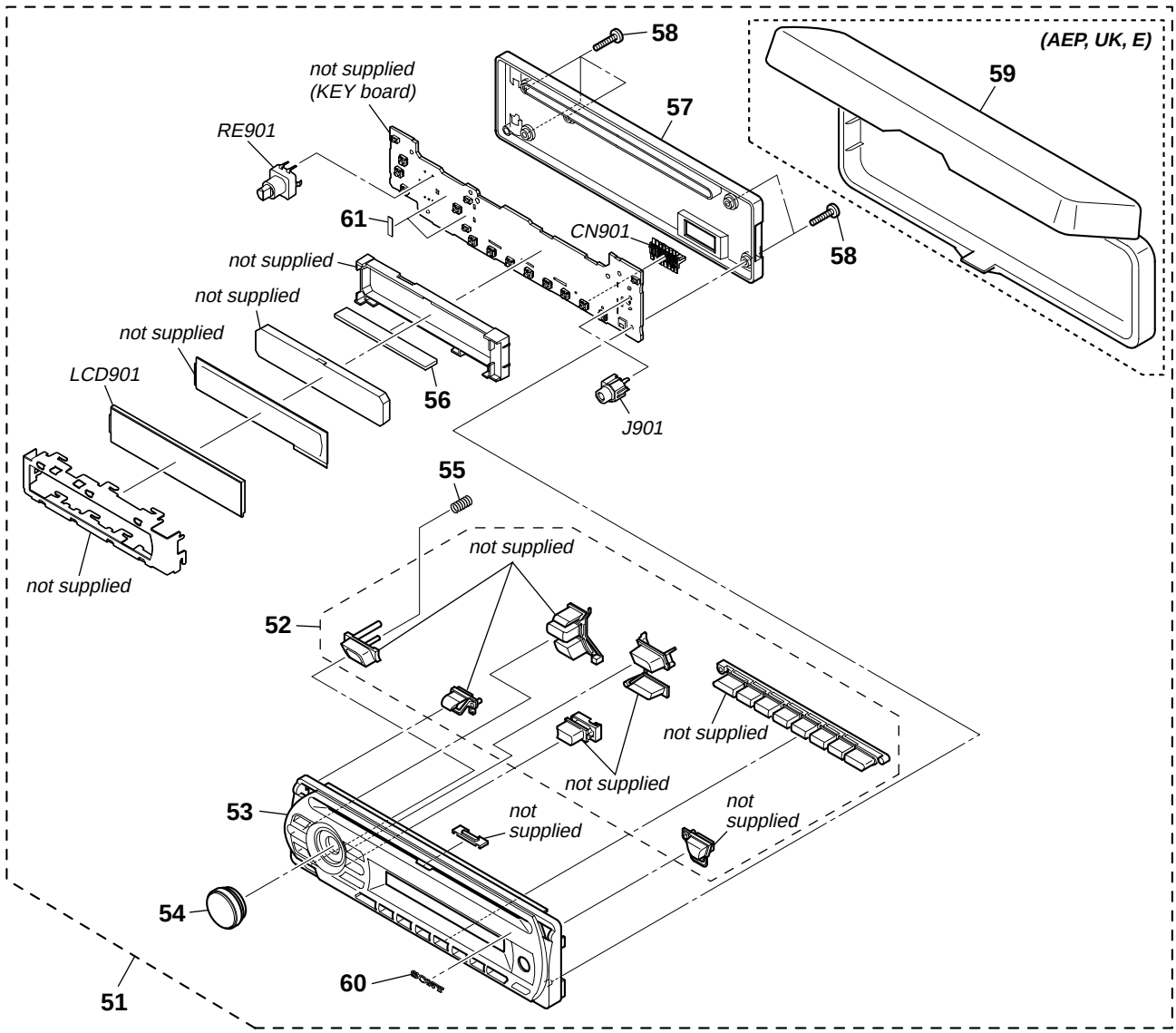
6-1. MAIN SECTION



Note: When the BT board is replaced, it is necessary to confirm operation. Refer to "BLUETOOTH FUNCTION CHECKING METHOD USING A CELLULAR PHONE" of the servicing note (See page 5).

Ref. No.	Part No.	Description	Remark
1	X-2176-834-1	PANEL ASSY, SUB (BT)	
2	3-042-244-11	SCREW (T)	
3	X-2108-670-1	LOCK ASSY (S)	
4	2-319-911-01	PLATE (MIC SLOT)	
5	2-898-980-01	HOLDER (MIC SLOT)	
6	1-964-881-11	CABLE, COAXIAL (WITH U.F.L CONNECTOR)	
7	3-376-464-11	SCREW (+PTT 2.6X6), GROUND POINT	
8	A-1243-385-A	MAIN BOARD, COMPLETE (Including BT board) (AEP, UK)	
8	A-1246-217-A	MAIN BOARD, COMPLETE (Including BT board) (E)	
8	A-1246-218-A	MAIN BOARD, COMPLETE (Including BT board) (US, CND)	
9	A-1243-387-A	BT BOARD, COMPLETE (Included in MAIN board)	
10	2-021-848-01	SHEET (TU), GROUND	
11	1-776-527-31	CORD (WITH CONNECTOR) (ISO) (POWER) (AEP, UK)	
11	1-833-655-11	CORD (WITH CONNECTOR) (POWER) (US, CND, E)	
12	3-250-543-21	SCREW (+B P-TITE M2)	
F301	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
MIC201	1-542-689-31	MICROPHONE	
TU1	A-3220-960-B	TUNER UNIT (TUX-032//Q2) (E)	
TU1	A-3220-961-B	TUNER UNIT(TUX-032//Q3) (US, CND, AEP, UK)	
#1	7-685-792-09	SCREW +PTT 2.6X6 (S)	
#2	7-685-790-01	SCREW +PTT 2.6X4 (S)	
#3	7-685-793-09	SCREW +PTT 2.6X8 (S)	
#4	7-685-794-09	SCREW +PTT 2.6X10 (S)	
#5	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	

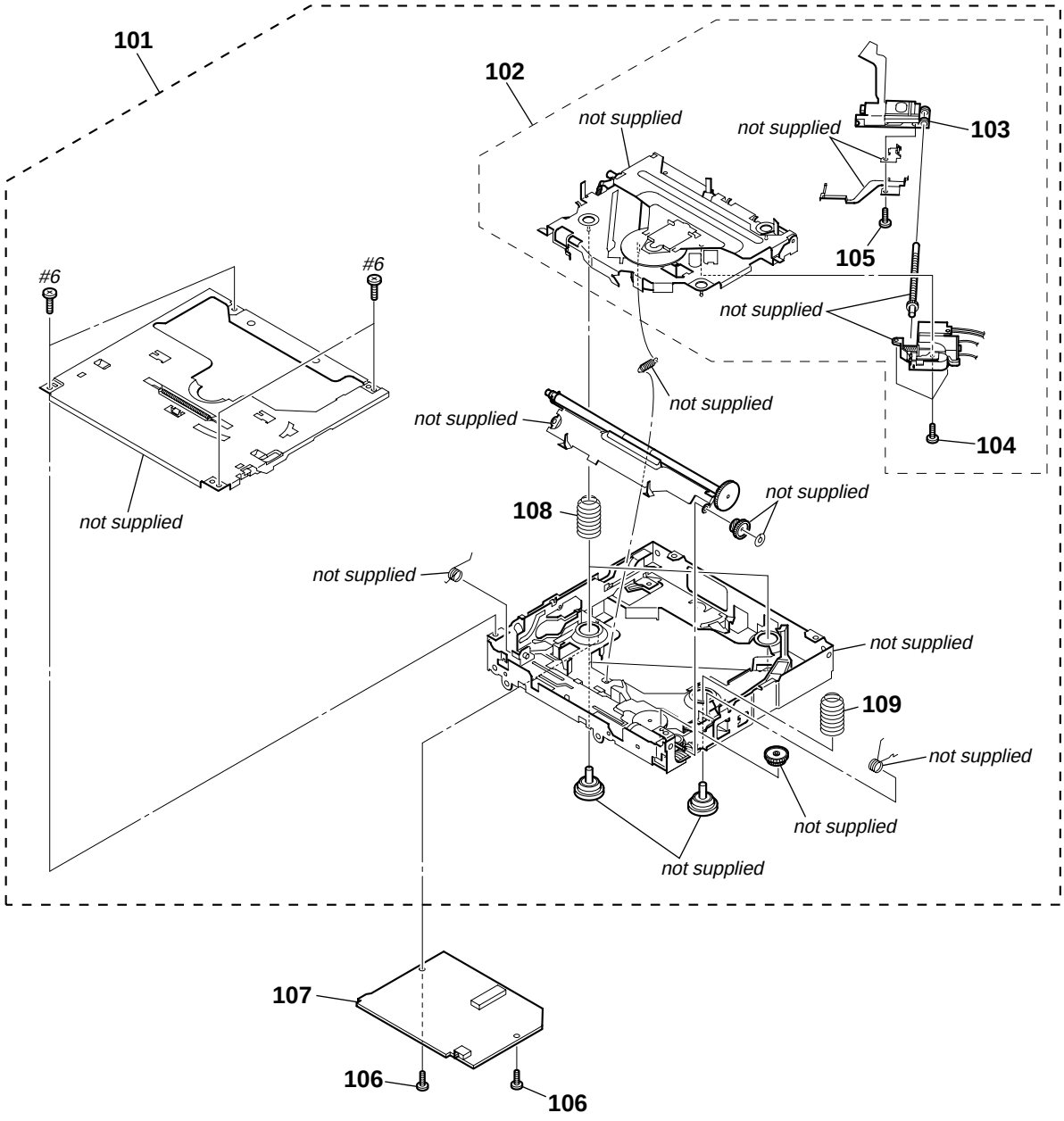
6-2. FRONT PANEL SECTION



Note: Refer to the Servicing Notes “NOTE FOR REPLACEMENT OF THE AUX JACK (J901)” (page 5), if replacing the Ref. No. J901.

Ref. No.	Part No.	Description	Remark
51	A-1239-389-A	PANEL COMPLETE ASSY, FRONT (AEP, UK)	
51	A-1239-390-A	PANEL COMPLETE ASSY, FRONT (US, CND)	
51	A-1267-957-A	PANEL COMPLETE ASSY, FRONT (E)	
52	X-2103-266-3	BUTTON ASSY (S) (US, CND, E)	
52	X-2149-102-3	BUTTON ASSY (S) (AEP, UK)	
53	X-2176-838-1	PANEL SUB ASSY, FRONT (AEP, UK)	
53	X-2176-839-1	PANEL SUB ASSY, FRONT (US, CND, E)	
54	X-2176-840-1	KNOB (VOL/BT) (SV) ASSY (S)	
55	2-693-599-01	SPRING (RELEASE)	
56	1-780-433-11	CONDUCTIVE BOARD, CONNECTION	
57	2-683-964-01	PANEL (LCD), BACK	
58	3-250-543-21	SCREW (+B P-TITE M2)	
59	X-2149-228-2	CASE ASSY (for FRONT PANEL) (AEP, UK, E)	
60	3-251-320-01	EMBLEM (NO. 2.5), SONY	
61	3-229-100-01	SHEET (SW), ADHESIVE	
CN901	1-819-758-12	PLUG, CONNECTOR 15P	
J901	1-820-624-11	SMALL TYPE JACK (VERTICAL) (AUX)	
LCD901	1-802-408-11	DISPLAY PANEL, LIQUID CRYSTAL	
RE901	1-479-902-11	ENCODER, ROTARY (PUSH SELECT/HANDSFREE, VOLUME)	

6-3. CD MECHANISM DECK SECTION (MG-101TA-188//Q)



Ref. No.	Part No.	Description	Remark
101	A-1177-168-A	MECHANICAL BLOCK ASSY	
⚠102	A-1177-169-A	DAXEV//Q	
⚠103	X-2149-672-1	SERVICE ASSY, OP (DAX-25A)	
104	2-626-869-01	SCREW (M2X3), SERRATION	
105	3-348-998-31	SCREW (M1.4X2.5), TAPPING, PAN	
106	3-352-758-31	SCREW (M1.7X2.5), TOOTHED LOCK	
107	A-1177-201-A	SERVO BOARD, COMPLETE	
108	3-257-892-01	SPRING (DAMPER), COIL (SILVER)	
109	3-257-892-12	SPRING (DAMPER), COIL (GREEN)	
#6	7-627-000-08	SCREW, PRECISION +P 1.7X2.2 TYPE 3	

SECTION 7
ELECTRICAL PARTS LIST

ANTENNA | BT | KEY

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA... : µA... uPA... : µPA...
  uPB... : µPB... uPC... : µPC...
  uPD... : µPD...
- Abbreviation
  CND : Canadian model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
		ANTENNA BOARD			
		**********			
		< CONNECTOR >			
CN1	1-784-081-11	CONNECTOR, COAXIAL (SMT TYPE)			
		< JUMPER RESISTOR >			
R1	1-218-990-11	SHORT CHIP 0			
**********					
	A-1243-387-A	BT BOARD, COMPLETE (Included in MAIN board)			
		**********			
When BT board is defective, exchange the entire mounted board.					
**********					
		KEY BOARD			
		**********			
	1-780-433-11	CONDUCTIVE BOARD, CONNECTION			
		< CAPACITOR >			
C971	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C981	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C983	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C984	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
C985	1-131-664-91	CERAMIC CHIP	0.15uF	10% 10V	
C986	1-127-715-11	CERAMIC CHIP	0.22uF	10% 16V	
C987	1-162-964-11	CERAMIC CHIP	0.001uF	10% 50V	
C988	1-107-826-11	CERAMIC CHIP	0.1uF	10% 16V	
		< CONNECTOR >			
CN901	1-819-758-12	PLUG, CONNECTOR 15P			
		< DIODE/JUMPER RESISTOR >			
D903	8-719-057-80	DIODE MA8180-M-TX			
D981	8-719-420-90	DIODE MA8051-M			
D982	8-719-988-61	DIODE 1SS355TE-17			
D987	8-719-420-90	DIODE MA8051-M			
D988	8-719-420-90	DIODE MA8051-M			
D989	8-719-420-90	DIODE MA8051-M			
D990	8-719-420-90	DIODE MA8051-M			
D991	8-719-977-12	DIODE DTZ6.8B			
D992	8-719-977-12	DIODE DTZ6.8B			
D993	8-719-977-12	DIODE DTZ6.8B			
D994	8-719-977-12	DIODE DTZ6.8B			
D998	1-216-295-00	SHORT CHIP 0			
		< RESISTOR >			
FB901	1-216-809-11	METAL CHIP	100	5% 1/10W	
FB902	1-216-809-11	METAL CHIP	100	5% 1/10W	
FB903	1-216-295-00	SHORT CHIP 0			
		< IC >			
IC901	6-710-047-01	IC LC75836WH-US-E			
IC971	6-600-163-01	IC RS-770			
		< JACK >			
J901	1-820-624-11	SMALL TYPE JACK (VERTICAL) (AUX)			
		< LIQUID CRYSTAL DISPLAY >			
LCD901	1-802-408-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< LED >			
LED931	6-501-339-01	LED NESW505CT-AST (LCD BACK LIGHT)			
LED941	6-501-547-01	LED CL-197HB1E-D-T (⏏)			
LED942	6-501-547-01	LED CL-197HB1E-D-T (DISC SLOT ILLUMINATION)			
LED943	6-501-547-01	LED CL-197HB1E-D-T (OFF)			
LED944	6-501-547-01	LED CL-197HB1E-D-T (SOURCE)			
LED945	6-501-547-01	LED CL-197HB1E-D-T (MODE)			
LED951	6-501-547-01	LED CL-197HB1E-D-T (PUSH SELECT/HANDSFREE, VOLUME)			
LED952	6-501-547-01	LED CL-197HB1E-D-T (PUSH SELECT/HANDSFREE, VOLUME)			
LED953	6-501-547-01	LED CL-197HB1E-D-T (PUSH SELECT/HANDSFREE, VOLUME)			
		< SWITCH >			
LSW901	1-786-998-12	SWITCH, TACT (WITH LED) (BLUETOOTH, EQ)			
LSW902	1-786-998-12	SWITCH, TACT (WITH LED) (BTM) (US, CND, E)			
LSW902	1-786-998-12	SWITCH, TACT (WITH LED) (PTY) (AEP, UK)			
LSW903	1-786-998-12	SWITCH, TACT (WITH LED) (SEEK+, ▶▶ ▶▶I)			
LSW904	1-786-998-12	SWITCH, TACT (WITH LED) (SEEK–, I◀◀ ◀◀)			
LSW905	1-786-998-12	SWITCH, TACT (WITH LED) (DIM, DSPL)			
LSW906	1-786-998-12	SWITCH, TACT (WITH LED) (ALBM –, 1)			

Note: When the BT board is replaced, it is necessary to confirm operation.
Refer to "BLUETOOTH FUNCTION CHECKING METHOD USING A CELLULAR PHONE" of the servicing note (See page 5).

Note: Refer to the Servicing Notes "NOTE FOR REPLACEMENT OF THE AUX JACK (J901)" (page 5), if replacing the Ref. No. J901.

KEY **MAIN**

Ref. No.	Part No.	Description			Remark
LSW907	1-786-998-12	SWITCH, TACT (WITH LED) (ALBM +, 2)			
LSW908	1-786-998-12	SWITCH, TACT (WITH LED) (REP, 3)			
LSW909	1-786-998-12	SWITCH, TACT (WITH LED) (SHUF, 4)			
LSW910	1-786-998-12	SWITCH, TACT (WITH LED) (5)			
LSW911	1-786-998-12	SWITCH, TACT (WITH LED) (PAUSE, 6)			
LSW912	1-786-998-12	SWITCH, TACT (WITH LED) (SCRL) (US, CND, E)			
LSW912	1-786-998-12	SWITCH, TACT (WITH LED) (AF/TA) (AEP, UK)			
		< TRANSISTOR >			
Q931	8-729-027-44	TRANSISTOR	DTC114TKA-T146		
Q932	6-551-444-01	TRANSISTOR	RT1N436C-TP-1		
		< RESISTOR >			
R901	1-216-820-11	METAL CHIP	820	5%	1/10W
R902	1-216-821-11	METAL CHIP	1K	5%	1/10W
R903	1-216-821-11	METAL CHIP	1K	5%	1/10W
R904	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R905	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R907	1-216-820-11	METAL CHIP	820	5%	1/10W
R908	1-216-821-11	METAL CHIP	1K	5%	1/10W
R909	1-216-821-11	METAL CHIP	1K	5%	1/10W
R910	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R911	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R912	1-216-824-11	METAL CHIP	1.8K	5%	1/10W
R913	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R914	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R915	1-216-828-11	METAL CHIP	3.9K	5%	1/10W
R916	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R921	1-216-295-00	SHORT CHIP	0		
R922	1-216-295-00	SHORT CHIP	0		
R923	1-216-295-00	SHORT CHIP	0		
R931	1-216-813-11	METAL CHIP	220	5%	1/10W
R932	1-216-813-11	METAL CHIP	220	5%	1/10W
R933	1-216-813-11	METAL CHIP	220	5%	1/10W
R934	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R941	1-216-810-11	METAL CHIP	120	5%	1/10W
R942	1-216-813-11	METAL CHIP	220	5%	1/10W
R943	1-216-817-11	METAL CHIP	470	5%	1/10W
R944	1-216-817-11	METAL CHIP	470	5%	1/10W
R945	1-216-820-11	METAL CHIP	820	5%	1/10W
R946	1-216-820-11	METAL CHIP	820	5%	1/10W
R947	1-216-817-11	METAL CHIP	470	5%	1/10W
R948	1-216-817-11	METAL CHIP	470	5%	1/10W
R949	1-216-810-11	METAL CHIP	120	5%	1/10W
R950	1-216-813-11	METAL CHIP	220	5%	1/10W
R951	1-216-810-11	METAL CHIP	120	5%	1/10W
R952	1-216-813-11	METAL CHIP	220	5%	1/10W
R953	1-216-817-11	METAL CHIP	470	5%	1/10W
R954	1-216-817-11	METAL CHIP	470	5%	1/10W
R961	1-216-815-11	METAL CHIP	330	5%	1/10W
R962	1-216-815-11	METAL CHIP	330	5%	1/10W
R974	1-216-809-11	METAL CHIP	100	5%	1/10W
R975	1-216-809-11	METAL CHIP	100	5%	1/10W
R977	1-216-809-11	METAL CHIP	100	5%	1/10W
R978	1-216-809-11	METAL CHIP	100	5%	1/10W
R979	1-216-809-11	METAL CHIP	100	5%	1/10W
R981	1-216-811-11	METAL CHIP	150	5%	1/10W

Ref. No.	Part No.	Description			Remark
R982	1-216-811-11	METAL CHIP	150	5%	1/10W
R984	1-216-821-11	METAL CHIP	1K	5%	1/10W
R985	1-216-821-11	METAL CHIP	1K	5%	1/10W
R986	1-216-821-11	METAL CHIP	1K	5%	1/10W
R987	1-216-857-11	METAL CHIP	1M	5%	1/10W
R988	1-216-840-11	METAL CHIP	39K	5%	1/10W
R992	1-216-864-11	SHORT CHIP	0		
		< ROTARY ENCODER >			
RE901	1-479-902-11	ENCODER, ROTARY (PUSH SELECT/HANDSFREE, VOLUME)			
		< SWITCH >			
S901	1-786-653-21	SWITCH, TACTILE (⏏)			
S902	1-786-653-21	SWITCH, TACTILE (OFF)			
S903	1-786-653-21	SWITCH, TACTILE (SOURCE)			
S904	1-786-653-21	SWITCH, TACTILE (MODE)			
**********					
	A-1243-385-A	MAIN BOARD, COMPLETE (AEP, UK)			
	A-1246-217-A	MAIN BOARD, COMPLETE (E)			
	A-1246-218-A	MAIN BOARD, COMPLETE (US, CND)			
		********** (Including BT board)			
	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT			
	7-685-794-09	SCREW +PTT 2.6X10 (S)			
		< CAPACITOR >			
C1	1-126-963-11	ELECT	4.7uF	20%	50V (AEP, UK)
C2	1-126-947-11	ELECT	47uF	20%	35V
C3	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C4	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (US, CND, E)
C5	1-126-947-11	ELECT	47uF	20%	35V
C6	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C7	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C8	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C50	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C51	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C52	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C53	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C54	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C55	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C56	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C57	1-126-947-11	ELECT	47uF	20%	35V (AEP, UK)
C58	1-162-959-11	CERAMIC CHIP	330PF	5%	50V (AEP, UK)
C59	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (AEP, UK)
C60	1-162-927-11	CERAMIC CHIP	100PF	5%	50V (AEP, UK)

Ref. No.	Part No.	Description			Remark
C61	1-162-917-11	CERAMIC CHIP	15PF	5%	50V (AEP, UK)
C62	1-162-917-11	CERAMIC CHIP	15PF	5%	50V (AEP, UK)
C301	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C303	1-107-907-11	ELECT	22uF	20%	50V
C304	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C305	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C306	1-126-964-11	ELECT	10uF	20%	50V
C307	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C308	1-126-964-11	ELECT	10uF	20%	50V
C309	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C312	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C313	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C314	1-124-261-00	ELECT	10uF	20%	50V
C315	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C316	1-124-261-00	ELECT	10uF	20%	50V
C317	1-124-257-00	ELECT	2.2uF	20%	50V
C318	1-162-923-11	CERAMIC CHIP	47PF	5%	50V
C319	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C320	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C325	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C330	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C404	1-126-160-11	ELECT	1uF	20%	50V
C405	1-126-160-11	ELECT	1uF	20%	50V
C406	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C407	1-127-715-11	CERAMIC CHIP	0.22uF	10%	16V
C410	1-126-160-11	ELECT	1uF	20%	50V
C411	1-126-160-11	ELECT	1uF	20%	50V
C413	1-126-964-11	ELECT	10uF	20%	50V
C414	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C415	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C418	1-126-934-11	ELECT	220uF	20%	16V
C419	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C421	1-126-964-11	ELECT	10uF	20%	50V
C422	1-126-964-11	ELECT	10uF	20%	50V
C423	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C424	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C430	1-107-906-11	ELECT	10uF	20%	50V
C431	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C432	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C441	1-107-906-11	ELECT	10uF	20%	50V
C442	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C443	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C451	1-124-584-00	ELECT	100uF	20%	10V
C452	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C453	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C454	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C455	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C456	1-124-584-00	ELECT	100uF	20%	10V
C457	1-124-234-00	ELECT	22uF	20%	16V
C458	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C460	1-124-233-11	ELECT	10uF	20%	16V
C461	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C491	1-126-947-11	ELECT	47uF	20%	35V
C501	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C503	1-124-584-00	ELECT	100uF	20%	10V
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C507	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C508	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C509	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C510	1-165-908-11	CERAMIC CHIP	1uF	10%	10V
C511	1-124-584-00	ELECT	100uF	20%	10V
C512	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C515	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C516	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C519	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C520	1-126-916-11	ELECT	1000uF	20%	6.3V
C521	1-126-916-11	ELECT	1000uF	20%	6.3V
C600	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C601	1-109-982-11	CERAMIC CHIP	1uF	10%	10V
C602	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C603	1-163-017-00	CERAMIC CHIP	0.0047uF	10%	50V
C604	1-126-961-11	ELECT	2.2uF	20%	50V
C605	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-112-302-11	ELECT	3300uF	20%	16V
C702	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C703	1-164-005-11	CERAMIC CHIP	0.47uF		25V
C704	1-115-340-11	CERAMIC CHIP	0.22uF	10%	25V
C705	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C706	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C800	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C801	1-104-665-11	ELECT	100uF	20%	25V
C827	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C828	1-124-589-11	ELECT	47uF	20%	16V
C840	1-126-160-11	ELECT	1uF	20%	50V
C841	1-126-160-11	ELECT	1uF	20%	50V
C887	1-216-864-11	SHORT CHIP	0		
C889	1-216-864-11	SHORT CHIP	0		

< CONNECTOR >

CN300	1-774-701-21	PIN, CONNECTOR 16P
CN350	1-820-611-11	CONNECTOR, BOARD TO BOARD 28P
CN701	1-819-773-13	SOCKET, CONNECTOR 15P

< DIODE >

D2	8-719-977-03	DIODE DTZ5.6B
D103	8-719-977-12	DIODE DTZ6.8B
D104	8-719-977-12	DIODE DTZ6.8B
D108	8-719-057-80	DIODE MA8180-M-TX
D301	6-500-522-01	DIODE 10EDB40-TA1B2
D303	6-500-522-01	DIODE 10EDB40-TA1B2
D305	6-500-522-01	DIODE 10EDB40-TA1B2
D306	6-500-522-01	DIODE 10EDB40-TA1B2
D307	6-500-522-01	DIODE 10EDB40-TA1B2
D308	6-500-522-01	DIODE 10EDB40-TA1B2
D309	6-500-522-01	DIODE 10EDB40-TA1B2
D310	6-500-522-01	DIODE 10EDB40-TA1B2
D311	6-500-522-01	DIODE 10EDB40-TA1B2
D312	6-500-522-01	DIODE 10EDB40-TA1B2
D451	6-501-051-01	DIODE BAT54CLT1G
D452	6-501-013-01	DIODE BAT54ALT1G
D491	8-719-988-61	DIODE 1SS355TE-17

MAIN

Ref. No.	Part No.	Description	Remark
D493	6-500-335-01	DIODE MC2838-T112-1	
D502	8-719-060-48	DIODE RB751V-40TE-17	
D503	8-719-988-61	DIODE 1SS355TE-17	
D580	8-719-422-76	DIODE MA8075-M	
D581	8-719-057-80	DIODE MA8180-M-TX	
D602	8-719-977-12	DIODE DTZ6.8B	
D702	8-719-057-80	DIODE MA8180-M-TX	
D703	8-719-977-12	DIODE DTZ6.8B	
D705	8-719-057-80	DIODE MA8180-M-TX	
D707	6-501-571-01	DIODE 1N5404-C311-3	
D800	8-719-992-02	DIODE RB705D	
D801	6-501-013-01	DIODE BAT54ALT1G	
		< JUMPER RESISTOR >	
FB451	1-216-864-11	SHORT CHIP 0	
FB452	1-216-864-11	SHORT CHIP 0	
FB453	1-216-295-00	SHORT CHIP 0	
FB454	1-216-295-00	SHORT CHIP 0	
FB455	1-216-864-11	SHORT CHIP 0	
FB456	1-216-864-11	SHORT CHIP 0	
FB457	1-216-295-00	SHORT CHIP 0	
FB458	1-216-864-11	SHORT CHIP 0	
FB800	1-216-295-00	SHORT CHIP 0	
		< IC >	
IC50	6-803-747-01	IC TDA7333013TR (AEP, UK)	
IC300	6-705-360-02	IC TDA8588BJ/N2/R1	
IC401	6-710-048-01	IC BD3444FS-E2	
IC501	6-807-360-01	IC MB90F045PF-G-9044-SPE1	
IC602	8-759-659-13	IC PST3428UL	
IC901	8-759-681-42	IC NJM12902V (TE2)	
		< JACK >	
J1	1-815-185-13	JACK (ANT) (ANTENNA IN)	
		< RESISTOR >	
JC1	1-216-295-00	SHORT CHIP 0	
JC2	1-216-864-11	SHORT CHIP 0	
JC4	1-216-296-11	SHORT CHIP 0	
JC5	1-216-296-11	SHORT CHIP 0	
JC9	1-216-864-11	SHORT CHIP 0	
JC10	1-216-864-11	SHORT CHIP 0	
JC11	1-216-296-11	SHORT CHIP 0	
JC12	1-216-296-11	SHORT CHIP 0	
JC13	1-216-864-11	SHORT CHIP 0	
JC14	1-216-296-11	SHORT CHIP 0	
JC15	1-216-296-11	SHORT CHIP 0	
JC25	1-216-296-11	SHORT CHIP 0	
JC26	1-216-296-11	SHORT CHIP 0	
JC27	1-216-296-11	SHORT CHIP 0	
JC29	1-216-296-11	SHORT CHIP 0	
JC30	1-216-296-11	SHORT CHIP 0	
JC31	1-216-296-11	SHORT CHIP 0	
JC38	1-216-296-11	SHORT CHIP 0 (US, CND, AEP, UK)	
JC50	1-216-295-00	SHORT CHIP 0	
JC53	1-216-845-11	METAL CHIP 100K 5% 1/10W	
JC55	1-216-296-11	SHORT CHIP 0	
JC56	1-216-864-11	SHORT CHIP 0	
JC80	1-216-864-11	SHORT CHIP 0	
		< COIL/RESISTOR >	
L1	1-469-844-11	INDUCTOR 2.2uH	
L4	1-500-245-11	INDUCTOR, FERRITE BEAD	
L50	1-469-844-11	INDUCTOR 2.2uH (AEP, UK)	
L51	1-216-809-11	METAL CHIP 100 5% 1/10W (AEP, UK)	
L52	1-216-809-11	METAL CHIP 100 5% 1/10W (AEP, UK)	
L301	1-469-844-11	INDUCTOR 2.2uH	
L451	1-469-844-11	INDUCTOR 2.2uH	
L501	1-469-844-11	INDUCTOR 2.2uH	
L700	1-456-617-11	COIL, CHOKE	
		< TRANSISTOR >	
Q1	8-729-038-28	TRANSISTOR RT1N441C-TP-1 (AEP, UK)	
Q3	6-551-431-01	TRANSISTOR 2SC6027T100-QR	
Q50	8-729-600-22	TRANSISTOR 2SA1235-F (AEP, UK)	
Q410	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q420	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q430	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q440	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q491	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q492	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q500	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q580	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q581	8-729-038-28	TRANSISTOR RT1N441C-TP-1	
Q582	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q702	8-729-620-07	TRANSISTOR 2SC3052EF-T1-LEF	
Q802	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q803	8-729-027-44	TRANSISTOR DTC114TKA-T146	
Q804	8-729-027-23	TRANSISTOR DTA114EKA-T146	
Q805	8-729-027-43	TRANSISTOR DTC114EKA-T146	
Q806	6-550-363-01	TRANSISTOR 2SB1690KT146	
Q807	8-729-038-28	TRANSISTOR RT1N441C-TP-1	
Q808	8-729-038-28	TRANSISTOR RT1N441C-TP-1	
		< RESISTOR/FERRITE BEAD >	
R1	1-216-809-11	METAL CHIP 100 5% 1/10W (AEP, UK)	
R2	1-216-839-11	METAL CHIP 33K 5% 1/10W	
R3	1-216-843-11	METAL CHIP 68K 5% 1/10W	
R4	1-216-839-11	METAL CHIP 33K 5% 1/10W	
R5	1-216-843-11	METAL CHIP 68K 5% 1/10W	
R6	1-414-595-11	INDUCTOR, FERRITE BEAD	
R7	1-414-595-11	INDUCTOR, FERRITE BEAD	
R8	1-216-839-11	METAL CHIP 33K 5% 1/10W (AEP, UK)	
R9	1-216-843-11	METAL CHIP 68K 5% 1/10W	
R10	1-216-821-11	METAL CHIP 1K 5% 1/10W	
R12	1-414-595-11	INDUCTOR, FERRITE BEAD	
R13	1-414-595-11	INDUCTOR, FERRITE BEAD	
R50	1-216-797-11	METAL CHIP 10 5% 1/10W (AEP, UK)	
R51	1-216-797-11	METAL CHIP 10 5% 1/10W (AEP, UK)	

Ref. No.	Part No.	Description			Remark
R52	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP, UK)
R53	1-414-595-11	INDUCTOR, FERRITE BEAD (AEP, UK)			
R54	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, UK)
R55	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP, UK)
R56	1-216-833-11	METAL CHIP	10K	5%	1/10W (AEP, UK)
R57	1-216-864-11	SHORT CHIP	0 (AEP, UK)		
R59	1-216-813-11	METAL CHIP	220	5%	1/10W (AEP, UK)
R301	1-216-811-11	METAL CHIP	150	5%	1/10W
R302	1-216-841-11	METAL CHIP	47K	5%	1/10W
R410	1-216-809-11	METAL CHIP	100	5%	1/10W
R411	1-216-821-11	METAL CHIP	1K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R420	1-216-809-11	METAL CHIP	100	5%	1/10W
R422	1-216-821-11	METAL CHIP	1K	5%	1/10W
R423	1-216-833-11	METAL CHIP	10K	5%	1/10W
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R431	1-216-821-11	METAL CHIP	1K	5%	1/10W
R432	1-216-833-11	METAL CHIP	10K	5%	1/10W
R440	1-216-809-11	METAL CHIP	100	5%	1/10W
R441	1-216-821-11	METAL CHIP	1K	5%	1/10W
R442	1-216-833-11	METAL CHIP	10K	5%	1/10W
R451	1-216-821-11	METAL CHIP	1K	5%	1/10W
R452	1-216-821-11	METAL CHIP	1K	5%	1/10W
R453	1-216-845-11	METAL CHIP	100K	5%	1/10W
R454	1-216-845-11	METAL CHIP	100K	5%	1/10W
R455	1-216-821-11	METAL CHIP	1K	5%	1/10W
R491	1-216-805-11	METAL CHIP	47	5%	1/10W
R502	1-216-809-11	METAL CHIP	100	5%	1/10W
R503	1-216-809-11	METAL CHIP	100	5%	1/10W
R504	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R505	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R506	1-216-864-11	SHORT CHIP	0		
R507	1-216-845-11	METAL CHIP	100K	5%	1/10W (US, CND, E)
R509	1-216-809-11	METAL CHIP	100	5%	1/10W
R510	1-216-821-11	METAL CHIP	1K	5%	1/10W
R511	1-216-821-11	METAL CHIP	1K	5%	1/10W
R512	1-216-821-11	METAL CHIP	1K	5%	1/10W
R517	1-216-841-11	METAL CHIP	47K	5%	1/10W
R519	1-216-845-11	METAL CHIP	100K	5%	1/10W
R520	1-216-809-11	METAL CHIP	100	5%	1/10W
R521	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R522	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R523	1-216-809-11	METAL CHIP	100	5%	1/10W
R524	1-216-833-11	METAL CHIP	10K	5%	1/10W
R525	1-216-833-11	METAL CHIP	10K	5%	1/10W
R526	1-216-845-11	METAL CHIP	100K	5%	1/10W
R528	1-216-845-11	METAL CHIP	100K	5%	1/10W
R529	1-216-821-11	METAL CHIP	1K	5%	1/10W
R531	1-216-845-11	METAL CHIP	100K	5%	1/10W
R532	1-216-845-11	METAL CHIP	100K	5%	1/10W
R533	1-216-845-11	METAL CHIP	100K	5%	1/10W
R534	1-216-833-11	METAL CHIP	10K	5%	1/10W
R536	1-216-833-11	METAL CHIP	10K	5%	1/10W
R537	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP, UK, E)
R538	1-216-845-11	METAL CHIP	100K	5%	1/10W (US, CND)
R540	1-216-845-11	METAL CHIP	100K	5%	1/10W
R541	1-216-845-11	METAL CHIP	100K	5%	1/10W
R542	1-216-845-11	METAL CHIP	100K	5%	1/10W
R543	1-216-864-11	SHORT CHIP	0		
R544	1-216-821-11	METAL CHIP	1K	5%	1/10W
R545	1-216-845-11	METAL CHIP	100K	5%	1/10W (E)
R546	1-216-845-11	METAL CHIP	100K	5%	1/10W (E)
R547	1-216-845-11	METAL CHIP	100K	5%	1/10W (US, CND, E)
R548	1-216-845-11	METAL CHIP	100K	5%	1/10W (US, CND, E)
R550	1-216-845-11	METAL CHIP	100K	5%	1/10W (E)
R551	1-216-845-11	METAL CHIP	100K	5%	1/10W (US, CND, AEP, UK)
R552	1-216-845-11	METAL CHIP	100K	5%	1/10W (US, CND, AEP, UK)
R554	1-216-821-11	METAL CHIP	1K	5%	1/10W
R556	1-216-845-11	METAL CHIP	100K	5%	1/10W
R557	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R558	1-216-845-11	METAL CHIP	100K	5%	1/10W
R561	1-216-845-11	METAL CHIP	100K	5%	1/10W
R563	1-216-845-11	METAL CHIP	100K	5%	1/10W
R565	1-216-845-11	METAL CHIP	100K	5%	1/10W
R566	1-216-845-11	METAL CHIP	100K	5%	1/10W
R567	1-216-845-11	METAL CHIP	100K	5%	1/10W
R569	1-216-833-11	METAL CHIP	10K	5%	1/10W
R570	1-216-817-11	METAL CHIP	470	5%	1/10W
R573	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP, UK)
R582	1-216-821-11	METAL CHIP	1K	5%	1/10W
R583	1-216-821-11	METAL CHIP	1K	5%	1/10W
R584	1-216-841-11	METAL CHIP	47K	5%	1/10W
R585	1-216-849-11	METAL CHIP	220K	5%	1/10W
R602	1-216-841-11	METAL CHIP	47K	5%	1/10W
R603	1-216-841-11	METAL CHIP	47K	5%	1/10W
R604	1-216-821-11	METAL CHIP	1K	5%	1/10W
R605	1-216-821-11	METAL CHIP	1K	5%	1/10W
R607	1-216-817-11	METAL CHIP	470	5%	1/10W
R608	1-216-817-11	METAL CHIP	470	5%	1/10W
R609	1-216-834-11	METAL CHIP	12K	5%	1/10W
R610	1-216-834-11	METAL CHIP	12K	5%	1/10W
R612	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R613	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R614	1-216-845-11	METAL CHIP	100K	5%	1/10W
R615	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R617	1-216-864-11	SHORT CHIP	0		
R679	1-216-809-11	METAL CHIP	100	5%	1/10W
R705	1-249-425-11	CARBON	4.7K	5%	1/4W
R706	1-216-841-11	METAL CHIP	47K	5%	1/10W
R707	1-216-841-11	METAL CHIP	47K	5%	1/10W
R708	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

MAIN **SENSOR** **SERVO**

Ref. No.	Part No.	Description			Remark
R709	1-216-049-11	RES-CHIP	1K	5%	1/10W
R800	1-216-821-11	METAL CHIP	1K	5%	1/10W
R801	1-216-821-11	METAL CHIP	1K	5%	1/10W
R810	1-216-817-11	METAL CHIP	470	5%	1/10W
R811	1-216-821-11	METAL CHIP	1K	5%	1/10W
R831	1-216-845-11	METAL CHIP	100K	5%	1/10W
R832	1-216-845-11	METAL CHIP	100K	5%	1/10W
R833	1-216-809-11	METAL CHIP	100	5%	1/10W
R834	1-216-809-11	METAL CHIP	100	5%	1/10W
R835	1-216-809-11	METAL CHIP	100	5%	1/10W
R836	1-216-809-11	METAL CHIP	100	5%	1/10W
R837	1-216-809-11	METAL CHIP	100	5%	1/10W
R838	1-216-809-11	METAL CHIP	100	5%	1/10W
R839	1-216-809-11	METAL CHIP	100	5%	1/10W
R840	1-216-809-11	METAL CHIP	100	5%	1/10W
R841	1-216-809-11	METAL CHIP	100	5%	1/10W
R842	1-216-809-11	METAL CHIP	100	5%	1/10W
R843	1-216-809-11	METAL CHIP	100	5%	1/10W
R844	1-216-809-11	METAL CHIP	100	5%	1/10W
R845	1-216-809-11	METAL CHIP	100	5%	1/10W
R846	1-216-809-11	METAL CHIP	100	5%	1/10W
		< SWITCH >			
S103	1-786-826-11	SWITCH, TACTILE (RESET)			
S501	1-571-478-11	SWITCH, SLIDE (FREQUENCY SELECTOR) (E)			
		< TUNER UNIT >			
TU1	A-3220-960-B	TUX-032//Q2 (TUNER UNIT) (E)			
TU1	A-3220-961-B	TUX-032//Q3 (TUNER UNIT)			(US, CND, AEP, UK)
		< VIBRATOR >			
X50	1-813-173-11	VIBRATOR, CRYSTAL (8.664MHz) (AEP, UK)			
X501	1-813-524-21	VIBRATOR, CERAMIC (18.432MHz)			
X502	1-813-202-11	VIBRATOR, CRYSTAL (32.768kHz)			

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SENSOR BOARD
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A-1177-201-A SERVO BOARD, COMPLETE
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When SERVO board is defective, exchange the entire mounted board.
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Ref. No.	Part No.	Description	Remark
		MISCELLANEOUS	
		**********	
6	1-964-881-11	CABLE, COAXIAL (WITH U.F.L CONNECTOR)	
11	1-776-527-31	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP, UK)
11	1-833-655-11	CORD (WITH CONNECTOR) (POWER)	(US, CND, E)
56	1-780-433-11	CONDUCTIVE BOARD, CONNECTION	
101	A-1177-168-A	MECHANICAL BLOCK ASSY	
⚠102	A-1177-169-A	DAXEV//Q	
⚠103	X-2149-672-1	SERVICE ASSY, OP (DAX-25A)	
F301	1-532-877-11	FUSE (BLADE TYPE) (AUTO FUSE) (10A/32V)	
MIC201	1-542-689-31	MICROPHONE	

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		ACCESSORIES	
		**********	
	1-480-150-11	REMOTE COMMANDER (RM-X304)	(including battery case lid)
	2-548-729-01	LID, BATTERY CASE (for RM-X304)	
	3-100-199-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, SPANISH)	(US, CND)
	3-100-199-21	MANUAL, INSTRUCTION (ENGLISH, GERMAN, FRENCH, ITALIAN, DUTCH, RUSSIAN)	(AEP, UK)
	3-100-199-31	MANUAL, INSTRUCTION (ENGLISH, SPANISH, SIMPLIFIED CHINESE)	(E)
	3-100-200-11	MANUAL, INSTALL INSTRUCTION (ENGLISH, FRENCH, SPANISH)	(US, CND)
	3-100-200-21	MANUAL, INSTALL INSTRUCTION (ENGLISH, GERMAN, FRENCH, ITALIAN, DUTCH, RUSSIAN)	(AEP, UK)
	3-100-200-31	MANUAL, INSTALL INSTRUCTION (ENGLISH, SPANISH, SIMPLIFIED CHINESE)	(E)
	3-100-201-11	QUICK GUIDE (BLUETOOTH) (ENGLISH, FRENCH, SPANISH)	(US, CND)
	3-100-201-21	QUICK GUIDE (BLUETOOTH) (ENGLISH, GERMAN, FRENCH)	(AEP, UK)
	3-100-201-31	QUICK GUIDE (BLUETOOTH) (ENGLISH, SPANISH, SIMPLIFIED CHINESE)	(E)
	3-100-201-41	QUICK GUIDE (BLUETOOTH) (ITALIAN, DUTCH, RUSSIAN)	(AEP, UK)

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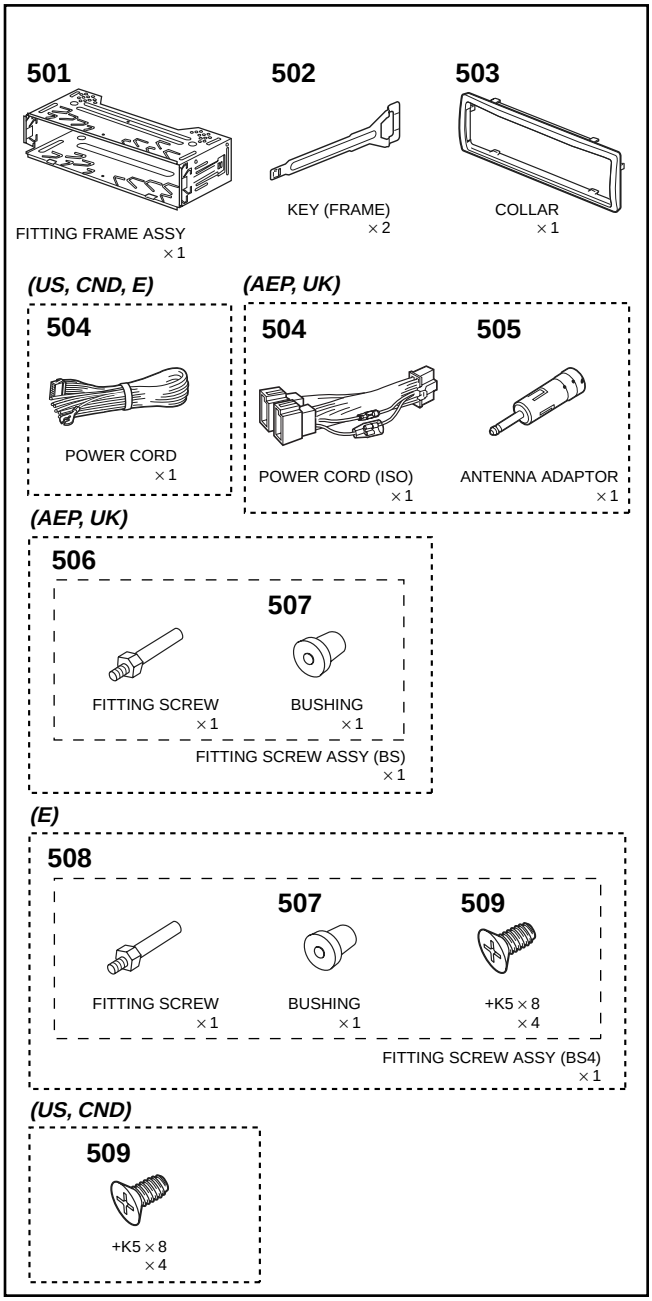
Ref. No.	Part No.	Description	Remark
		PARTS FOR INSTALLATION AND CONNECTIONS	
		**********	
501	X-3382-647-1	FRAME ASSY, FITTING	
502	3-246-471-01	KEY (FRAME)	
503	2-686-803-01	COLLAR	
504	1-776-527-31	CORD (WITH CONNECTOR) (ISO) (POWER)	(AEP, UK)
504	1-833-655-11	CORD (WITH CONNECTOR) (POWER)	(US, CND, E)
505	1-465-459-31	ADAPTER, ANTENNA (AEP, UK)	
506	X-3382-926-1	SCREW ASSY (BS), FITTING (AEP, UK)	
507	3-349-410-11	BUSHING (AEP, UK, E)	
508	X-3381-154-1	SCREW ASSY (BS4), FITTING (E)	
509	3-934-325-01	SCREW, +K (5X8) TAPPING (US, CND, E)	



REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2007.02	New